ICF-SW7600GR

SERVICE MANUAL

Ver 1.0 2001. 03

US Model
Canadian Model
AEP Model
Chinese Model
E Model
Tourist Model

SPECIFICATIONS

Circuit system	FM: Super heterodyne
	AM: Dual conversion super heterodyne
Frequency range	FM: 76–108 MHz
	SW: 1 621– 29 999 kHz
	MW: 530–1 620 kHz
	LW: 150–529 kHz
Output	LINE OUT jack (stereo minijack) × 1
	Recording output level approx. 245 mV, output impedance less than 10 kΩ
	∩ (headphones) jack (stereo minijack) × 1 16 Ω
Speaker	Approx. 77 mm diameter, 8 Ω × 1
Maximum output	380 mW (at 10 % harmonic distortion)
Power requirements	DC 6 V, four R6 (size AA) batteries
External power source	DC IN 6V (except Chinese)
Dimensions	Approx. 190 × 118.8 × 35.3 mm incl. projecting parts (w/h/d)
Mass	Approx. 536 g
	Approx. 608 g (incl. four R6 (size AA) batteries)

Supplied accessories
Carrying case (1)
Compact antenna AN-71 (1)
Wave Handbook (1)

Design and specifications are subject to change without notice.

FM STEREO/SW/MW/LW
PLL SYNTHESIZED RECEIVER

9-873-099-11
2001C1600-1
© 2001.3

Sony Corporation
Audio Entertainment Group
General Engineering Dept.

SONY®

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SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

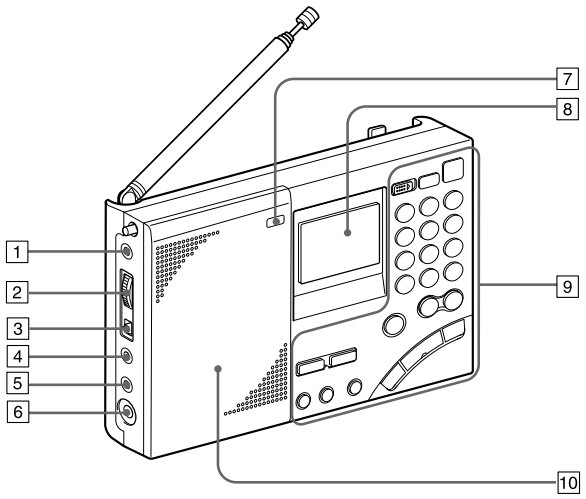
ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.

SECTION 1
GENERAL

This section is extracted from instruction manual.

Front



1 AM EXT ANT (AM external antenna) jack (35)

2 ATT (attenuator) control (21)

3 ATT (attenuator) ON/OFF switch (21)

4 LINE OUT (recording output) jack (33)

5 ∩ (headphones) jack (17, 33)
You can enjoy FM stereo broadcasting by connecting the optional stereo headphones to the unit . When using headphones, sound from the speaker will be muted.

6 DC IN 6V ⟐⋐⟐ (external power input) jack (10)

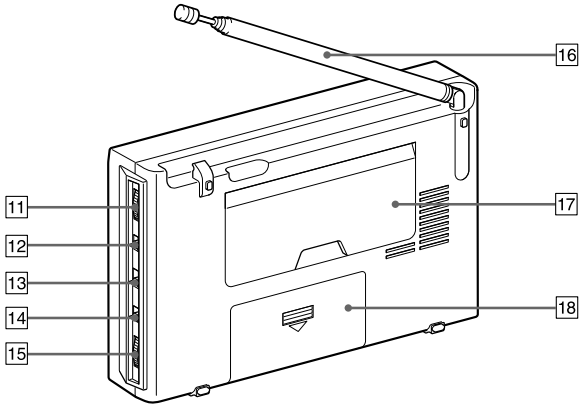
7 LIGHT button
When the display is difficult to see, press this button to light up the display for approximately 10 seconds. Pressing the button again while the light is on will turn off the light. Performing button operations while the light is on will extend the lighting time.

8 Display (7)

9 Controls (6)

10 Speaker

Rear



11 SSB FINE TUNE control (26)

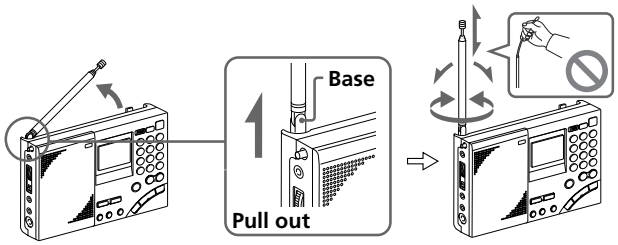
12 LSB/USB selector (26, 27)

13 AM MODE selector (26, 27)

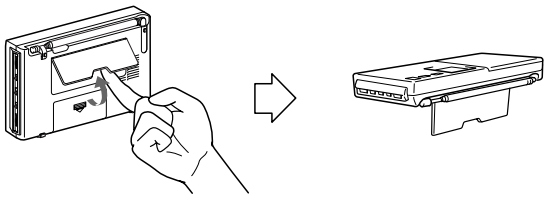
14 TONE selector (33)

15 VOLUME control

16 Telescopic antenna
Always pull out the base of the antenna before use. Furthermore, do not use unnecessary force when storing the antenna. At this time, be sure to push in the base as well.

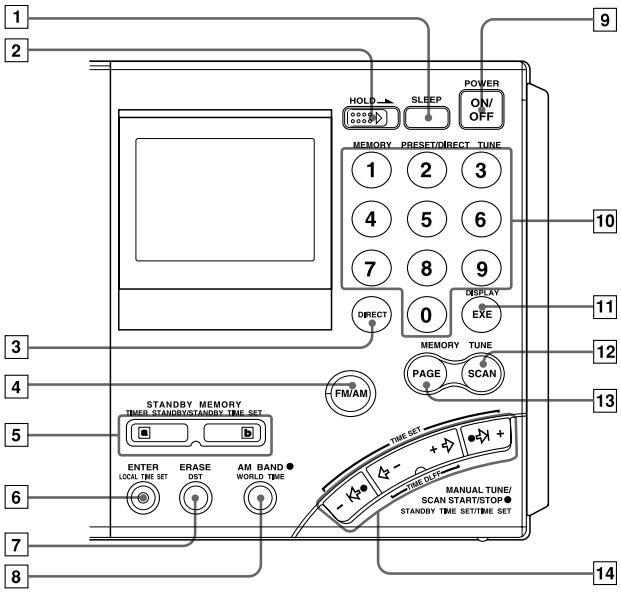


17 Stand



18 Battery compartment

Controls



1 SLEEP button (31)

2 HOLD switch (32)

3 DIRECT button (15, 16)

4 FM/AM button (16, 18, 20)

5 STANDBY MEMORY, TIMER STANDBY/ STANDBY TIME SET buttons (28, 30)

6 ENTER, LOCAL TIME SET button (11, 22, 28)

7 ERASE, DST (Daylight Saving Time) button (11, 13, 30)

8 AM BAND, WORLD TIME button (13, 18, 20)

9 POWER ON/OFF button

10 Number buttons (15, 16, 22, 23, 24)

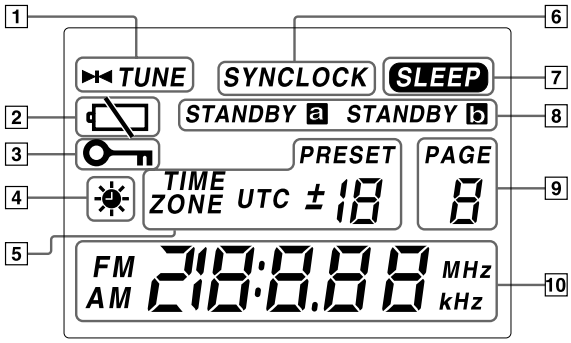
11 DISPLAY, EXE button (13, 15, 16)
Press to switch to clock display while operating the radio. Press again to return to the previous display. If you do not press the button, the display will return to the previous condition in about 10 seconds.

12 SCAN button (24)

13 PAGE button (22, 24)

14 MANUAL TUNE/SCAN START/STOP, STANDBY TIME SET/TIME SET buttons (11, 13, 18, 20, 28)

Display



1 TUNE indicator (16, 18)
Appears when a station is tuned in.

2 Battery indicator (9)

3 HOLD indicator (32)
Appears when HOLD is in effect. All buttons will be inoperative.

4 ☀ (Daylight Saving Time) indicator (12)
Appears when the time display is adjusted to the Daylight Saving Time.

5 Preset number/time difference display (11, 22, 23)

6 SYNCLOCK (synchronous detection lock) indicator (27)
Appears when synchronous detection is in effect.

7 SLEEP indicator (31)
Appears when the sleep timer is in effect.

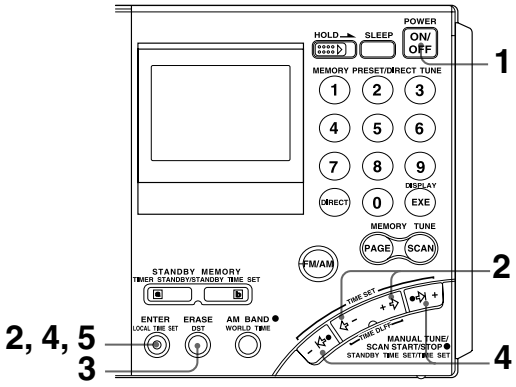
8 STANDBY a, STANDBY b indicators (28, 29, 30)
Light up when the standby timer is set.

9 PAGE number display
Appears constantly when the radio is on.

10 Time/frequency display

Setting the Current Time

"0:00" flashes in the display when installing the batteries for the first time or when the unit has been reset. Set the clock to the current time.



This unit can display local time, which is the time for your time zone, as well as world time, which is the time for any other area in the world.

For the calculation of the time in other areas of the world, the time difference* between the local time and the UTC (Universal Time Coordinated) is used (see page 14, "Time difference with UTC for each area"). To find out the correct time, set the correct time and time difference of the area you are in.

* This unit uses time zones to pinpoint specific areas.

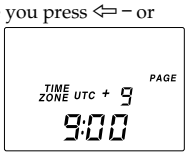
1 If the radio is turned on, press POWER ON/OFF to turn it off.

Note

You cannot set the clock when the radio is turned on.

2 Hold down LOCAL TIME SET and press ⇦ – or + ⇨ to choose the time difference between your local time and the UTC.

TIME ZONE indicator will appear. Each time you press ⇦ – or + ⇨, the time difference (UTC + or –) and the "hour" of the clock will increase or decrease accordingly.



Two short beeps will be heard when adjusting the time difference to ±0.

When you release LOCAL TIME SET, the TIME ZONE indicator will disappear and the time difference with UTC will be determined.

3 To set the daylight saving time, press DST to display the ☀ indicator.

If daylight saving time is not used in your area, daylight saving time is not currently in effect, or ☀ is already displayed, proceed to Step 4.

4 Hold down LOCAL TIME SET and press –I⇦ or ⇨I+ to set the local time.

Each time you press –I⇦ or ⇨I+, the current time will decrease or increase by a minute. To change the digits rapidly, hold down –I⇦ or ⇨I+.

Two short beeps will be heard when adjusting the time to "0:00".

5 Release LOCAL TIME SET.

" : " starts flashing and the clock starts running.

To switch to clock display while the radio is turned on

Press EXE. The display returns to the previous condition automatically after about 10 seconds or when EXE is pressed again. The time display period is extended when the WORLD TIME button is pressed during clock display, or when ⇦ – or + ⇨ is pressed during world time display. During clock display, radio operations such as changing frequencies are not possible. The clock will not be displayed during auto scan (page 20) or memory scan (page 24).

For areas adopting the daylight saving time (summer time)

Press DST to display the ☀ indicator if you are now in the summer time period. When the summer time period has ended, press DST to clear the ☀ indicator. The time display will be adjusted automatically.

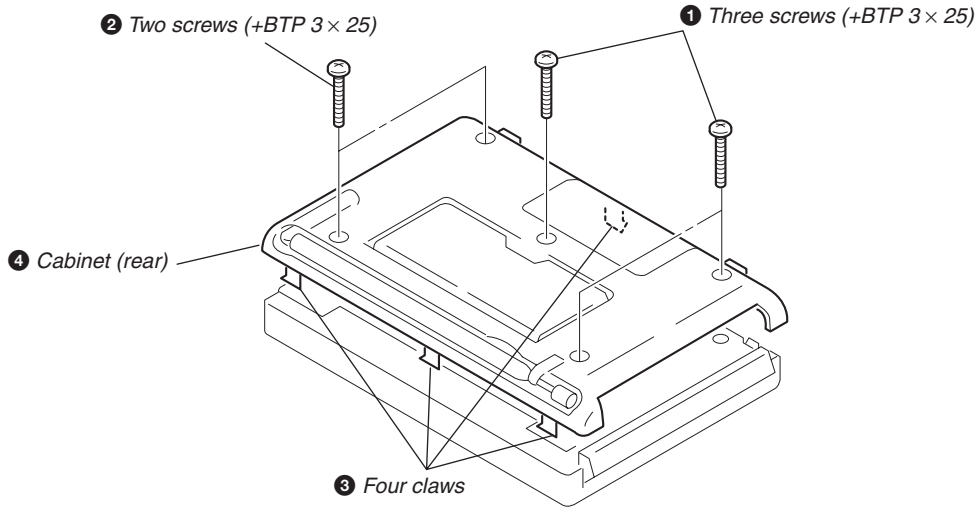
Tips

- The clock is displayed in the 24 hour system.
- Press LOCAL TIME SET to stop the flashing of "0:00".
- To adjust the time to the second, release LOCAL TIME SET at the time of the tone.

SECTION 2
DISASSEMBLY

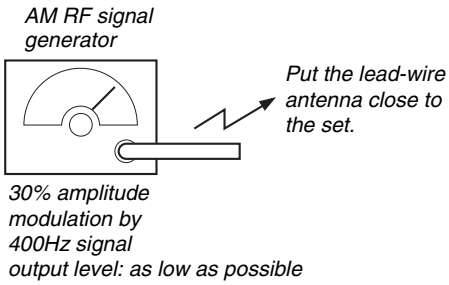
Note : Follow the disassembly procedure in the numerical order given.

2-1. CABINET (REAR)

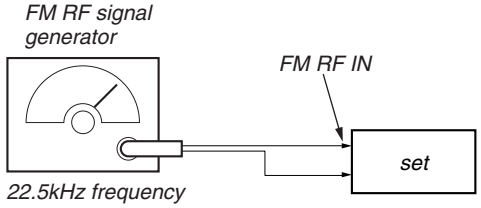


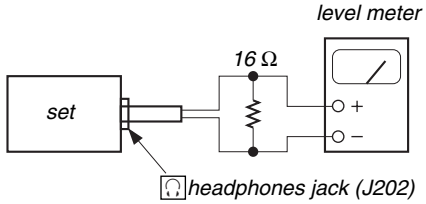
SECTION 3
ELECTRICAL ADJUSTMENTS

• AM Section


AM RF signal generator
Put the lead-wire antenna close to the set.
30% amplitude modulation by 400Hz signal
output level: as low as possible

• FM Section





(1) AM / FM VCO Check and Adjustment

Setting:

ATT switch	: OFF
TONE switch	: MUSIC
AM MODE switch	: NORM

Procedure:

1. Connect digital voltmeter to the TP VT.
2. Tune the set to AM 150kHz.
3. Confirm that the reading on the digital voltmeter becomes in more than 2.2V.
4. Tune the set to AM 29999kHz.
5. Confirm that the reading on the digital voltmeter becomes in less than 13V.
6. Tune the set to FM 108.00MHz.
7. Confirm that the reading on the digital voltmeter becomes in less than 13V.
8. IF the value is more than 13V, adjust T202 so that the reading on the digital voltmeter becomes in 12.5V.

Adjustment Location: MAIN board (See page 8)

(2) 1st IF Adjustment

Setting :

ATT switch	: OFF
TONE switch	: MUSIC
AM MODE switch	: NORM

Procedure:

1. Set the frequencies of the AM RF signal generator and the frequency display of the set to AM 150kHz.
2. Adjust T104 and T105 so that the reading on level meter becomes in maximum.

Adjustment Location: MAIN board (See page 8)

(3) 2nd Local Adjustment

Setting:

ATT switch : OFF
TONE switch : MUSIC
AM MODE switch : NORM

Procedure:

1. Connect frequency counter to the TP OSC2 through the high input impedance amplifier.
2. Tune the set to AM 150kHz.
3. Adjust CT202 so that the reading on the frequency counter becomes in 55.39000MHz±30Hz.(55.38997 to 55.39003MHz)

Adjustment Location: MAIN board (See page 8)

(4) FM Tracking Adjustment

Setting:

ATT switch : OFF
TONE switch : MUSIC

Procedure:

1. Set the frequency of the FM RF signal generator and the frequency display of the set to FM 108.00MHz.
2. Adjust CT101 and CT102 so that the reading on level meter becomes in maximum.
3. Set the frequency of the FM RF and the frequency display of the set to FM 76.00MHz.
4. Adjust T101 and T102 so that the reading on level meter becomes in maximum.
5. Repeat the above steps 1 to 4 several times.

Adjustment Location: MAIN board (See page 8)

(5) 76kHz (MPX) Adjustment

Setting:

ATT switch : OFF
TONE switch : MUSIC

Procedure:

1. Insert Headphones plug into headphones jack (J202) (for VCO operation).
2. Connect a capacitor (10µF) between IC202 pin① and GND.
3. Connect frequency counter to the TP 76K (VCO) through the high input impedance amplifier.
4. Tune the set to FM 108.00MHz.
5. Adjust RV203 so that the reading on the frequency counter becomes in 76kHz±300Hz.
6. Remove the headphones plug.

Adjustment Location: MAIN board (See page 8)

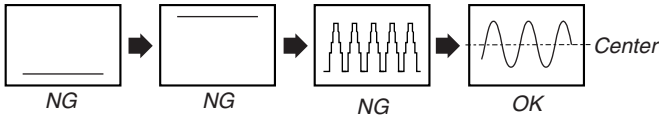
(6) Just Tune Adjustment

Setting :

ATT switch : OFF
TONE switch : MUSIC
(FM RF signal generator)
Frequency : 93.025MHz
Moduration : 22.5kHz
Output level : 54dB

Procedure:

1. Connect an oscilloscope to the TP SD.
2. Tune the set to FM 93.00MHz.
3. Adjust RV202 so that the waveform on the oscilloscope satisfy as shown the figure.



Adjustment Location: MAIN board (See page 8)

(7) SSB 0 Beat Adjustment

Setting :

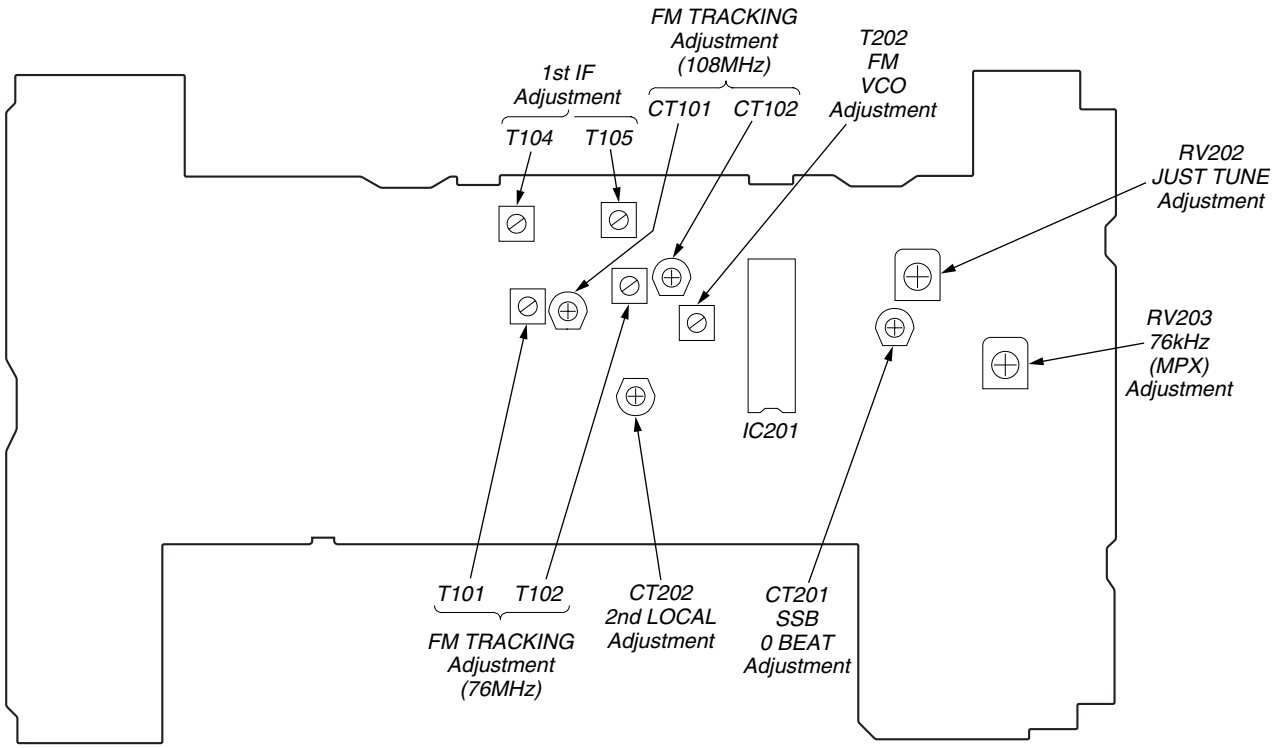
ATT switch : OFF
TONE switch : MUSIC
(AM RF signal generator)
Frequency : AM 150kHz
Moduration : None
Output level : 44dB

Procedure:

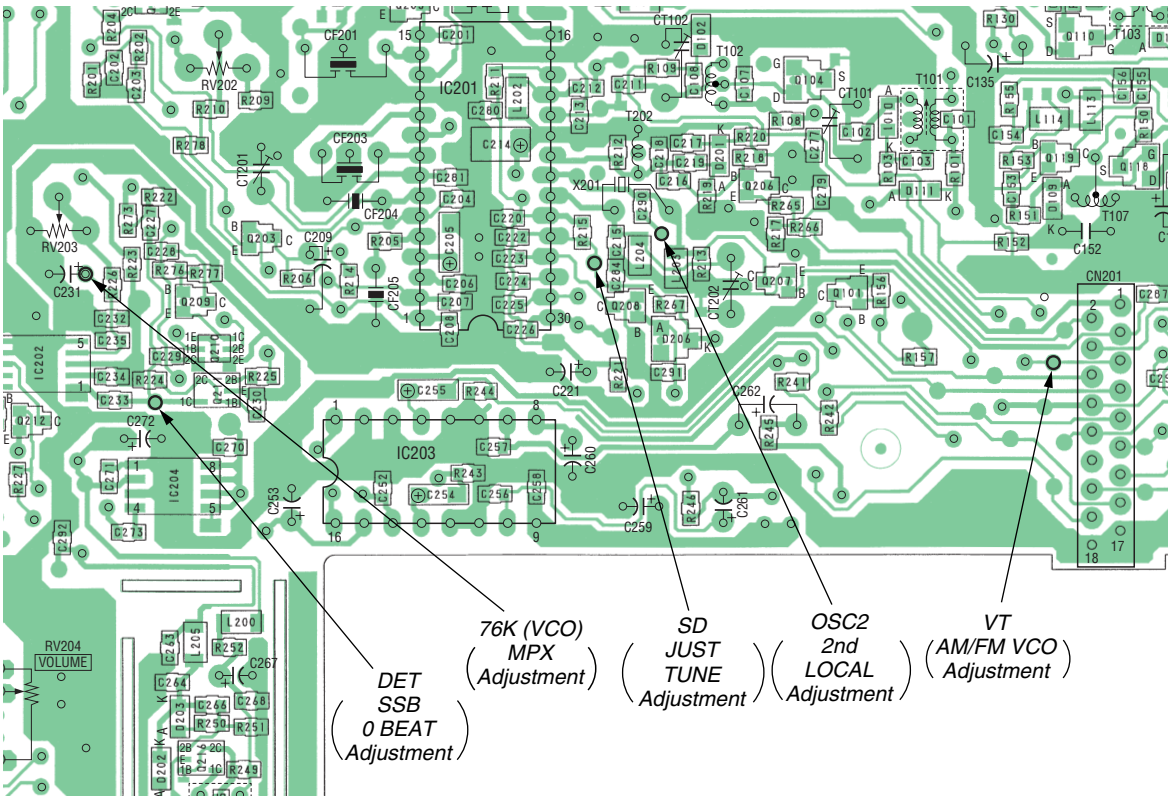
1. Connect an oscilloscope to the TP DET.
2. Tune the set to AM 150kHz.
3. Set the AM MODE switch to SYNC.
4. Set the SYNC switch to USB.
5. Adjust CT201 so that the waveform on the oscilloscope is minimized.
6. Set the SYNC switch to LSB.
7. Adjust CT201 so that the waveform on the oscilloscope is minimized.
8. Repeat the above steps 4 to 7 several times.
9. Set the AM MODE switch to SSB.
10. Confirm that the beat sound is changed by turning the SSB FINE TUNE control.

Adjustment Location: MAIN board (See page 8)

Adjustment Location :
[MAIN BOARD] — Component Side —

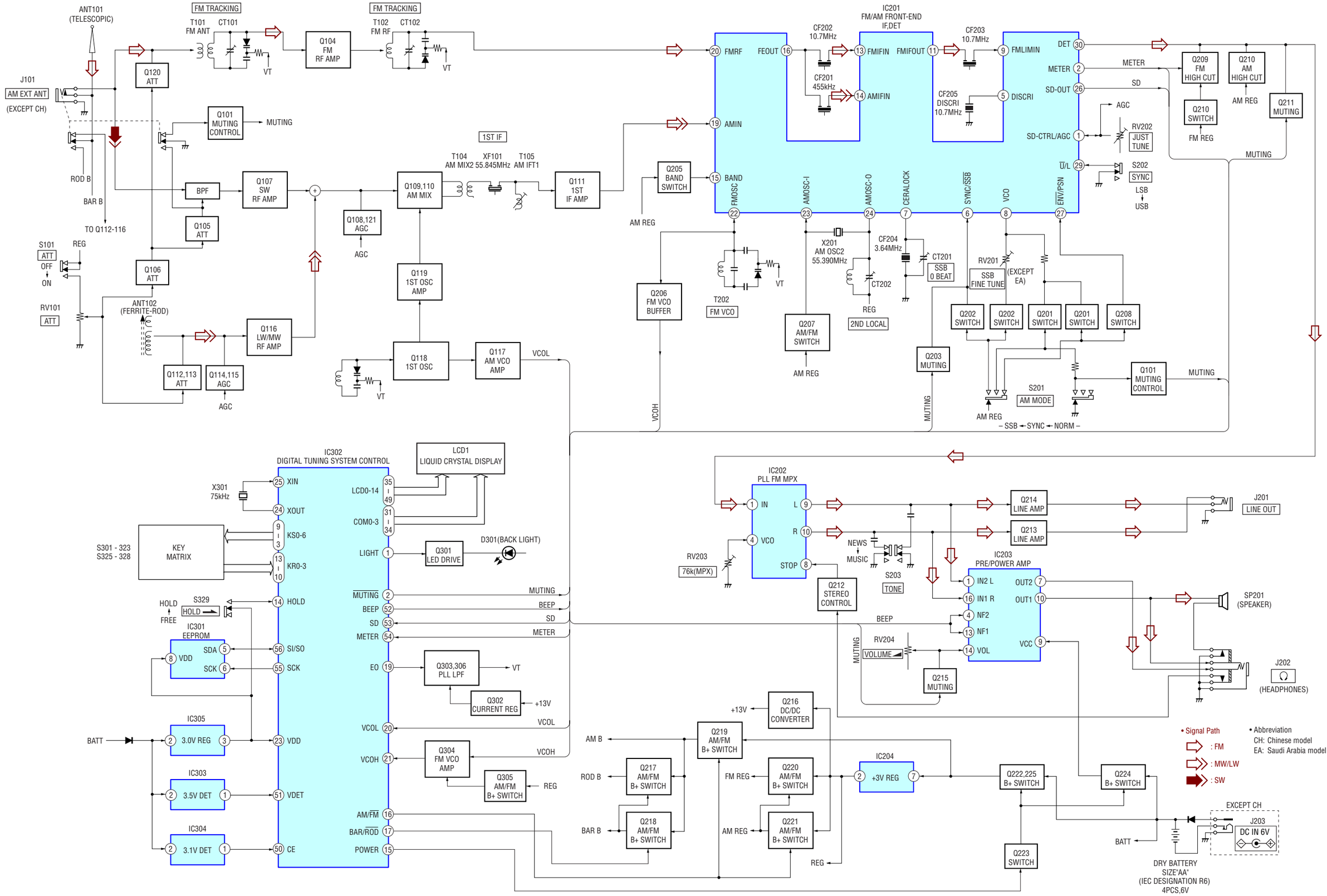


[MAIN BOARD] — Conductor Side —

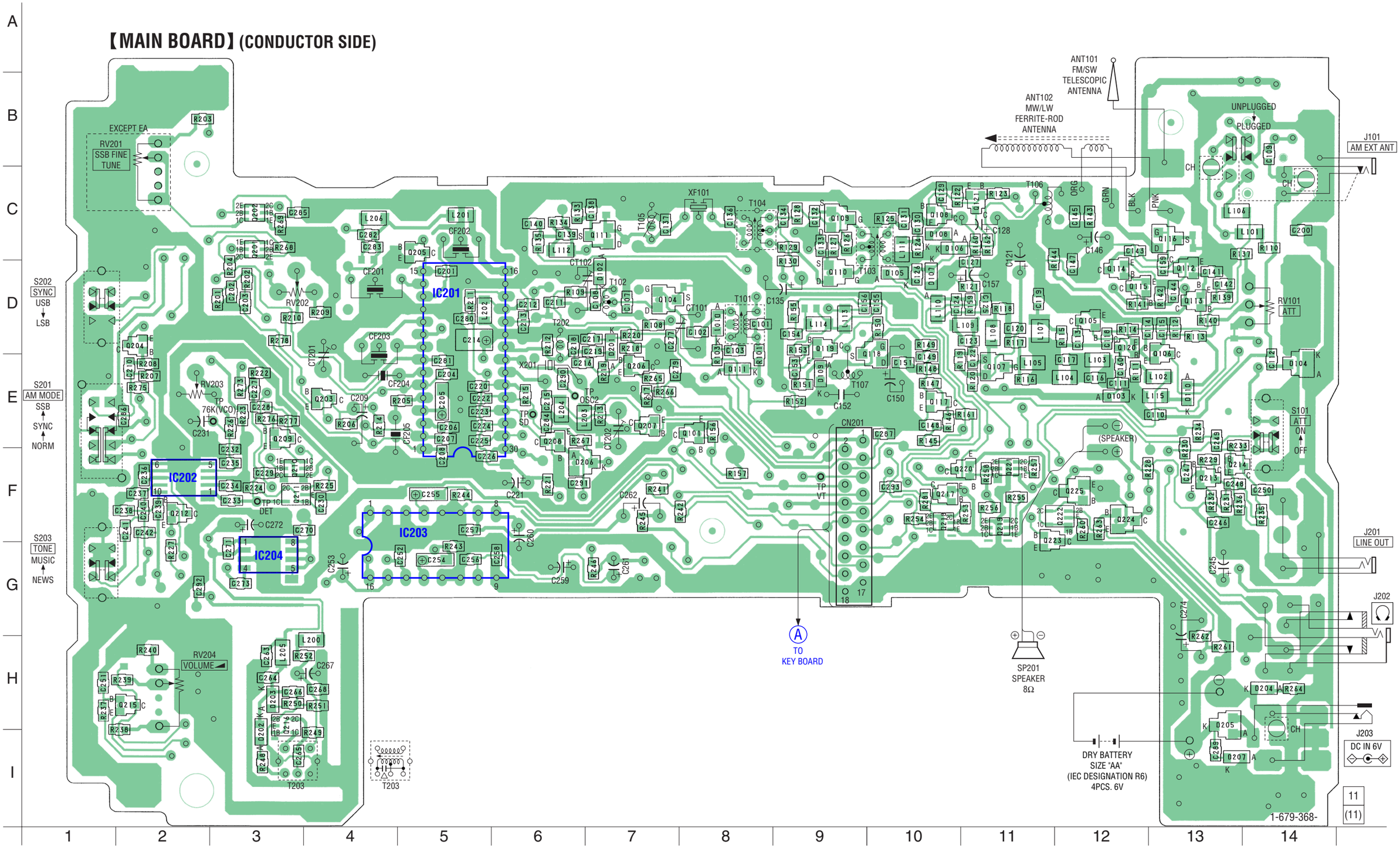


SECTION 4
DIAGRAMS

4-1. BLOCK DIAGRAM



4-2. PRINTED WIRING BOARD – MAIN BOARD (CONDUCTOR SIDE) –



• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D101	D-8	D110	E-13	IC201	D-5	Q107	E-11	Q116	C-13	Q204	D-2	Q213	F-13	Q222	F-12
D102	D-7	D111	E-8	IC202	F-2	Q108	C-10	Q117	E-10	Q205	C-5	Q214	F-13	Q223	F-11
D103	E-12	D201	D-7	IC203	F-5	Q109	C-9	Q118	D-10	Q206	E-7	Q215	H-2	Q224	F-12
D104	E-14	D202	I-3	IC204	G-3	Q110	D-9	Q119	D-9	Q207	E-7	Q216	H-3	Q225	F-12
D105	D-10	D203	H-3			Q111	C-7	Q120	D-12	Q208	E-6	Q217	F-10		
D106	C-10	D204	H-14	Q101	E-8	Q112	D-13	Q121	C-11	Q209	E-3	Q218	F-10		
D107	D-10	D205	H-13	Q104	D-7	Q113	D-13	Q201	C-3	Q210	F-3	Q219	F-11		
D108	D-10	D206	F-6	Q105	D-12	Q114	D-12	Q202	C-3	Q211	F-3	Q220	F-11		
D109	E-9	D207	I-14	Q106	D-13	Q115	D-12	Q203	E-4	Q212	F-2	Q221	F-11		

Note on Printed Wiring Boards:

- ○——○ : parts extracted from the component side.
- ○ : Through hole.
- ▬ : Pattern from the side which enables seeing.

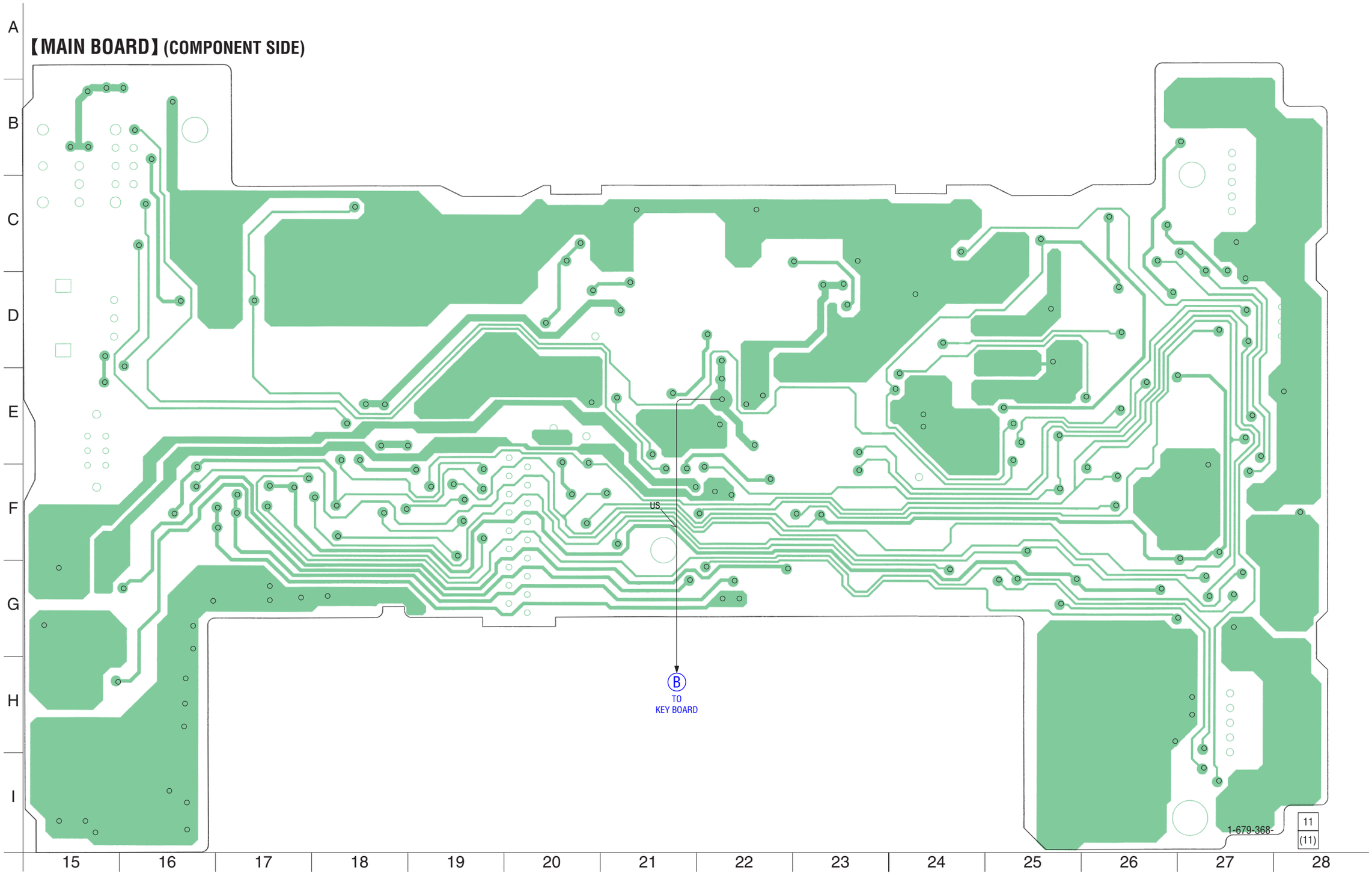
(The other layers' patterns are not indicated.)

Caution:

Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

• Abbreviation
CH : Chinese model.
EA : Saudi Arabia model.

4-3. PRINTED WIRING BOARD – MAIN BOARD (COMPONENT SIDE) –



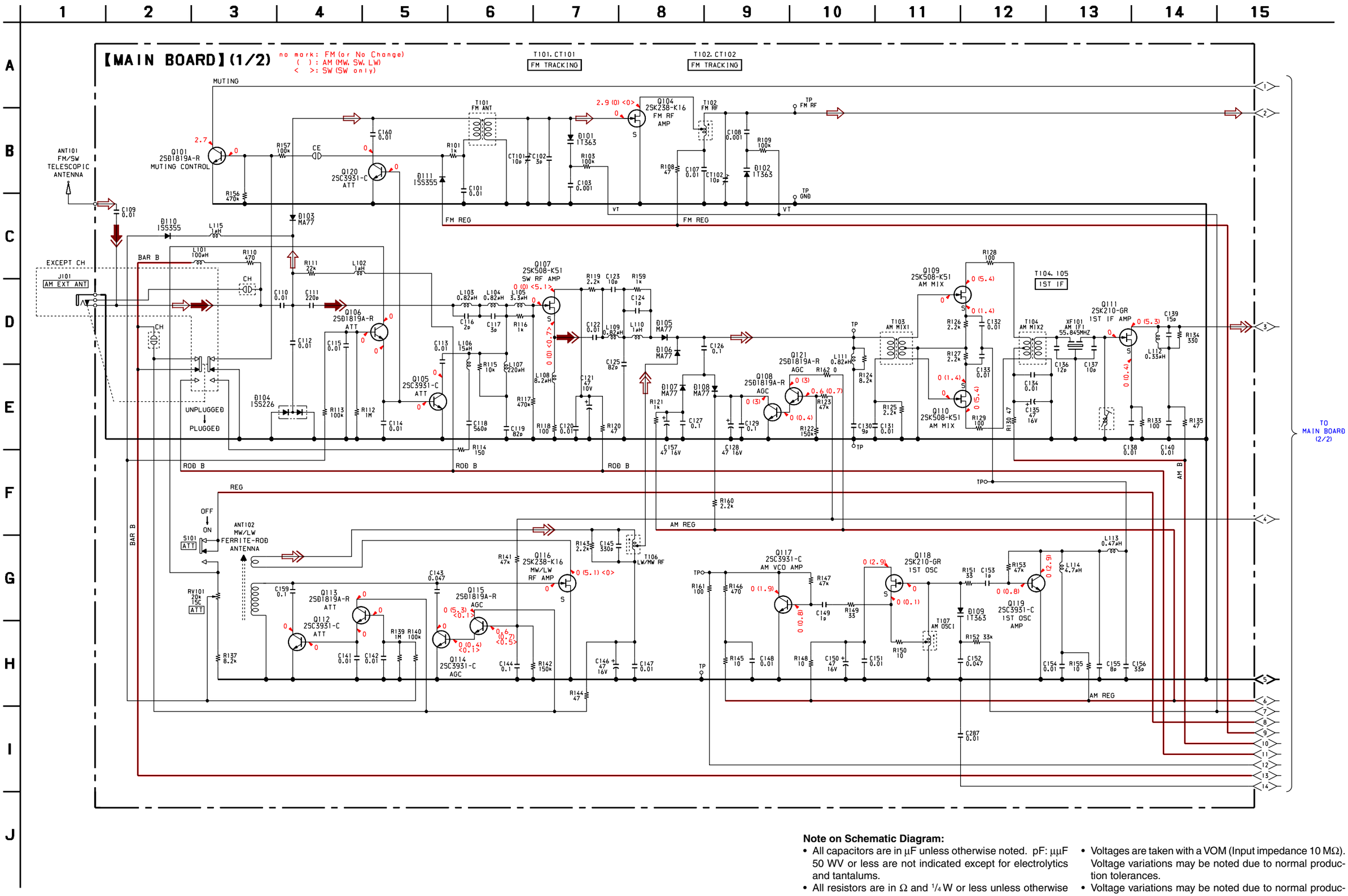
Note on Printed Wiring Boards:

- ○——— : parts extracted from the component side.
- ○ : Through hole.
- ▬ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

4-4. SCHEMATIC DIAGRAM – MAIN BOARD (1/2) –

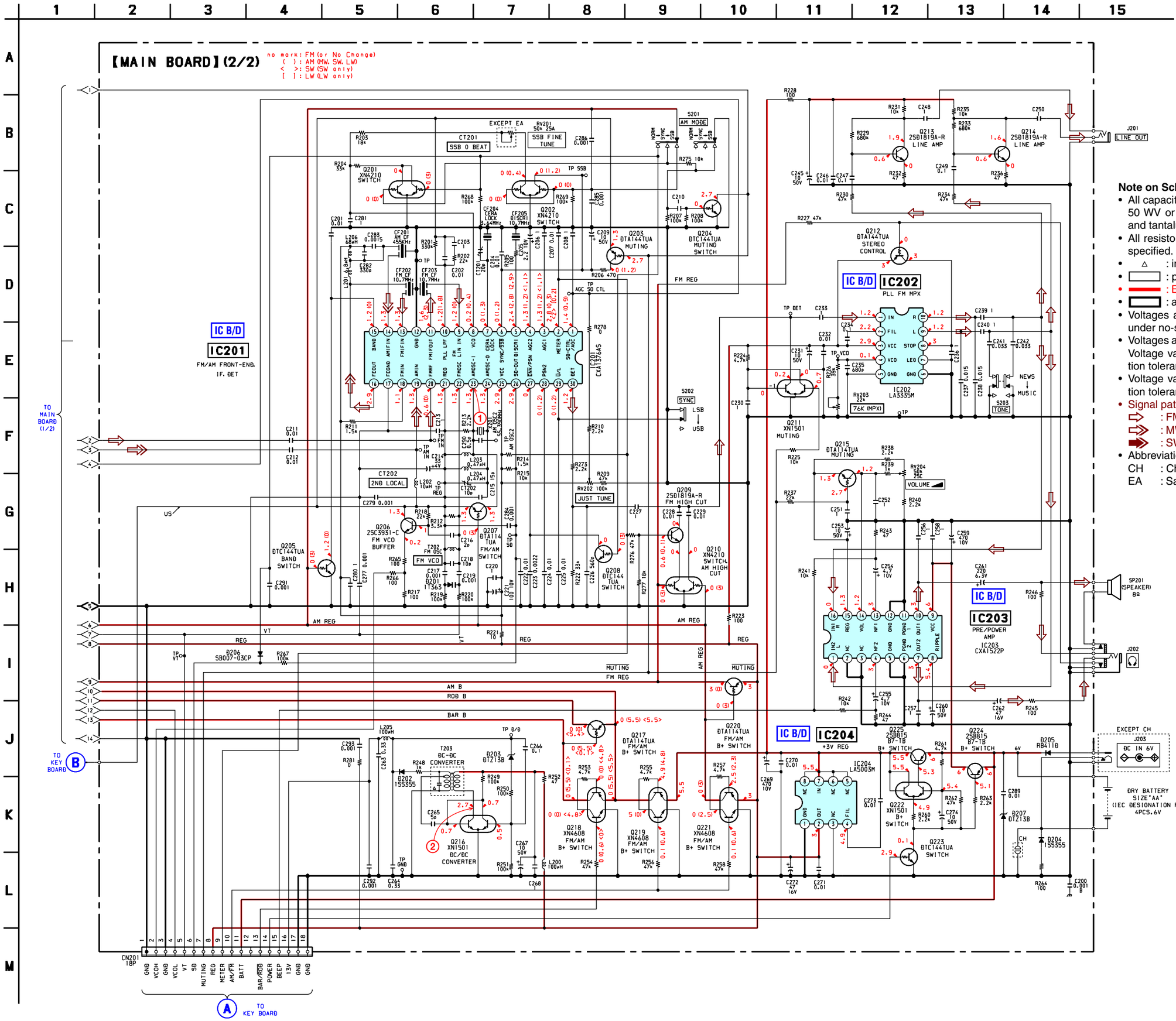


Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.
- ▬ : B+ Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Voltage variations may be noted due to normal production tolerances.
- Signal path.
  - ⇨ : FM
  - ⇨ : MW/LW
  - ➡ : SW
- Abbreviation
  CH : Chinese model

4-5. SCHEMATIC DIAGRAM – MAIN BOARD (2/2) –

• Refer to page 16 for IC Block Diagrams.

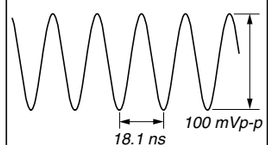


Note on Schematic Diagram:

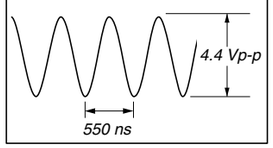
- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.
- ▬ : B+ Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Voltage variations may be noted due to normal production tolerances.
- Signal path.
  - ⇨ : FM
  - ⇨ : MW/LW
  - ➡ : SW
- Abbreviation
  - CH : Chinese model
  - EA : Saudi Arabia model

• WAVEFORMS

① IC201 ㉓

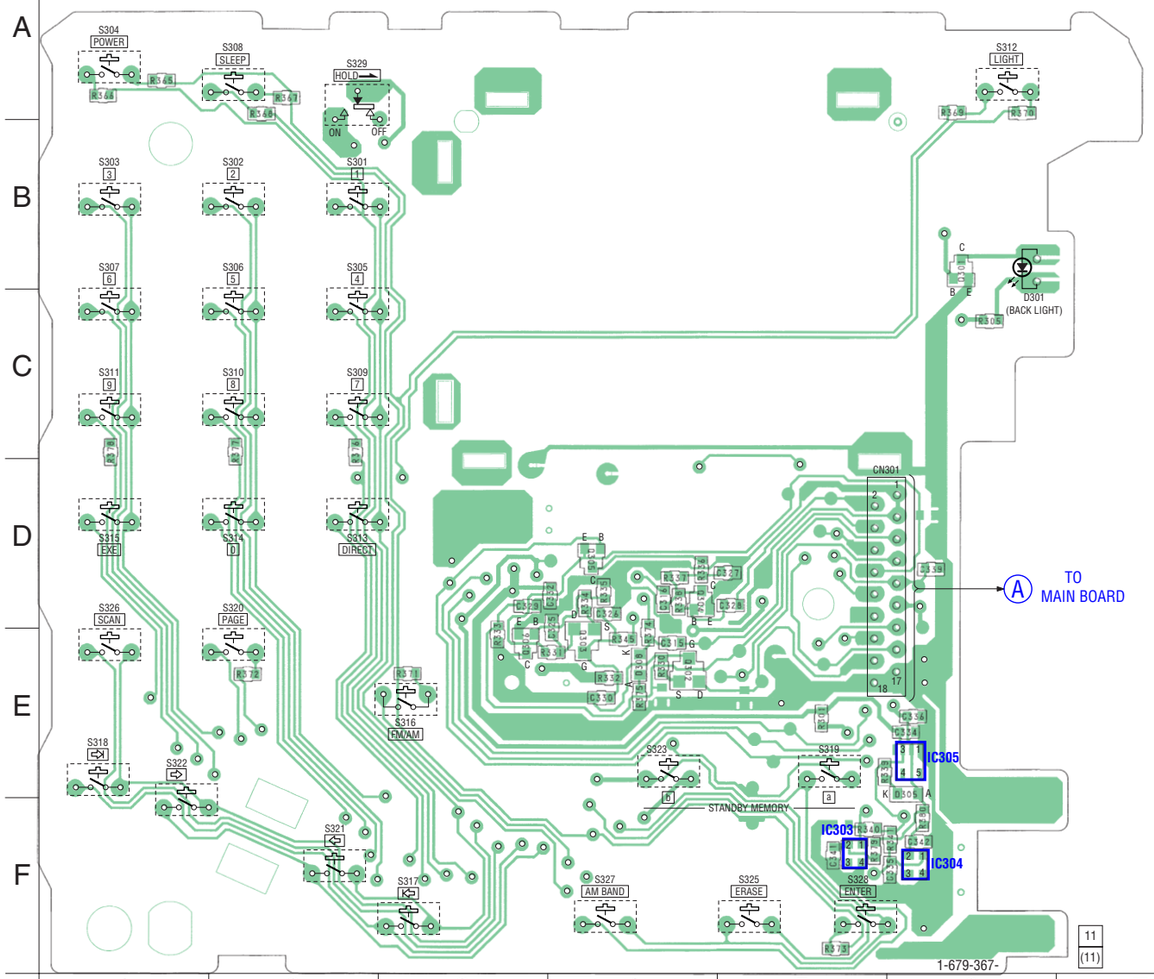


② Q216 Collector

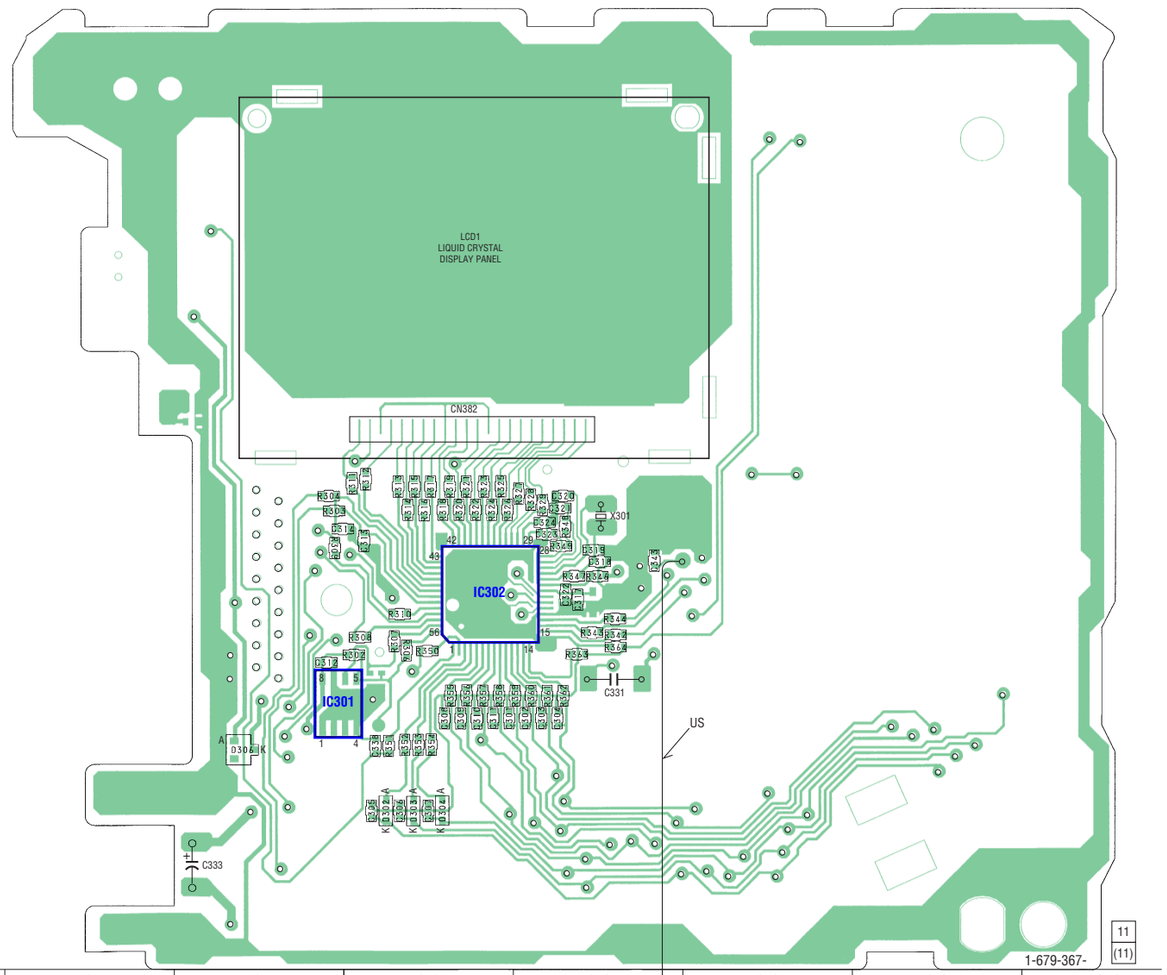


4-6. PRINTED WIRING BOARD – KEY BOARD –

【KEY BOARD】(CONDUCTOR SIDE)



【KEY BOARD】(COMPONENT SIDE)



- **Semiconductor Location**

Ref. No.	Location
D301	B-6
D302	F-10
D303	F-10
D304	F-10
D305	E-6
D306	E-9
D308	E-4
IC301	E-9
IC302	D-10
IC303	E-5
IC304	F-6
IC305	E-6
Q301	B-6
Q302	E-4
Q303	E-4
Q304	D-4
Q305	D-4
Q306	E-3

Note on Printed Wiring Boards:

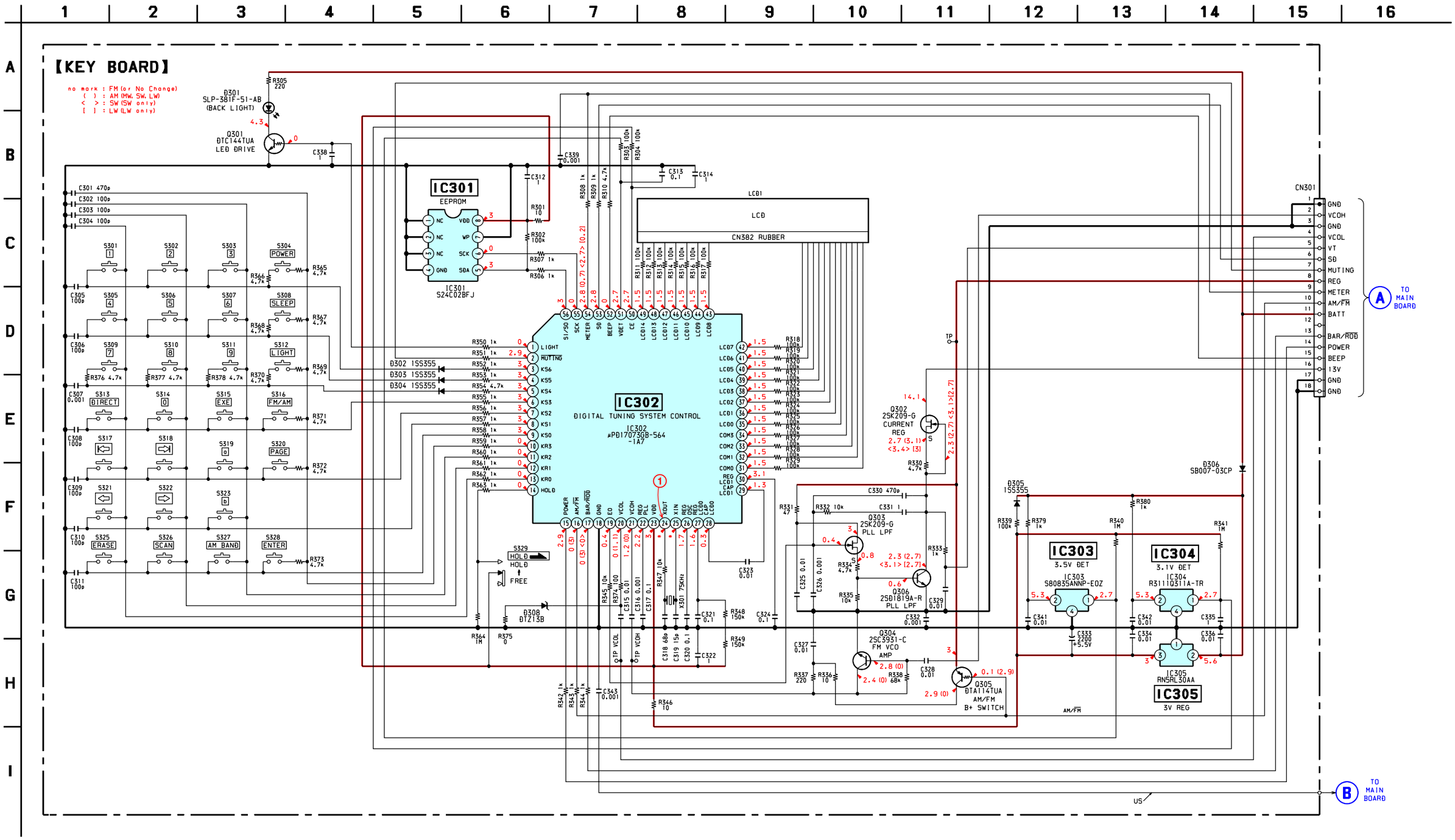
- ○——— : parts extracted from the component side.
- ○ : Through hole.
- ▬ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

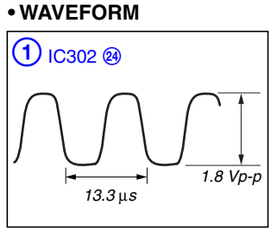
Caution:	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

4-7. SCHEMATIC DIAGRAM – KEY BOARD –

• Refer to page 16 for IC Pin Function.



• WAVEFORM

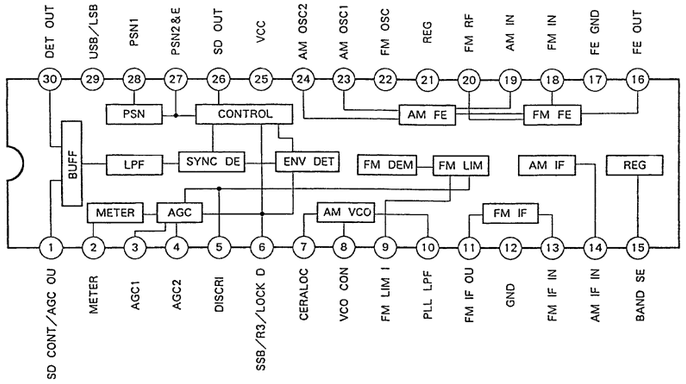


Note on Schematic Diagram:

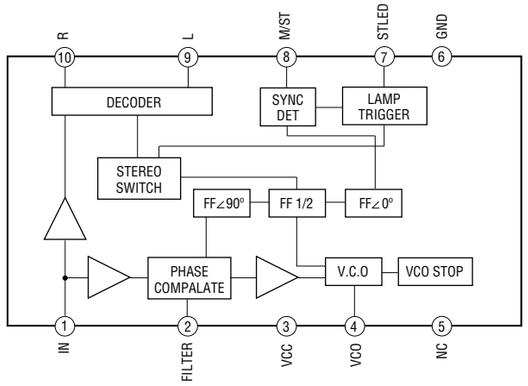
- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.
- ▬ : B+ Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Voltage variations may be noted due to normal production tolerances.
- Abbreviation
  CH : Chinese model

• IC BLOCK DIAGRAMS

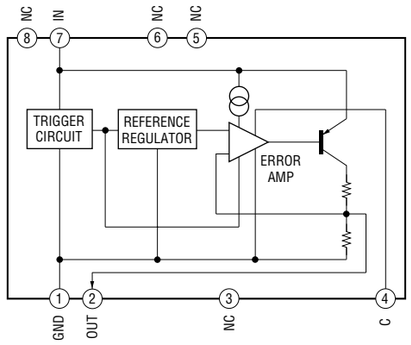
IC201 CXA1376AS



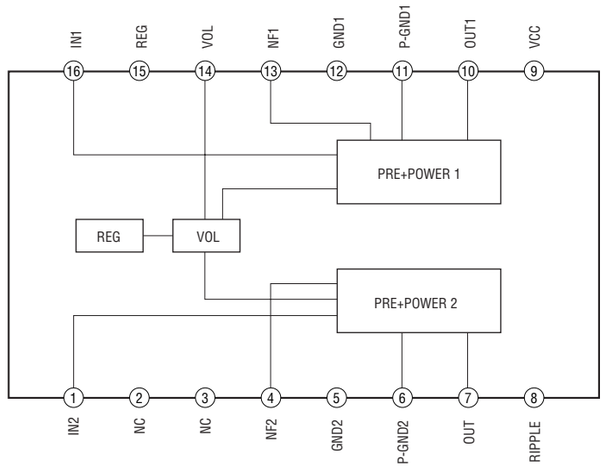
IC202 LA3335M



IC204 LA5003M



IC203 CXA1522P



4-8. IC PIN FUNCTION DESCRIPTION

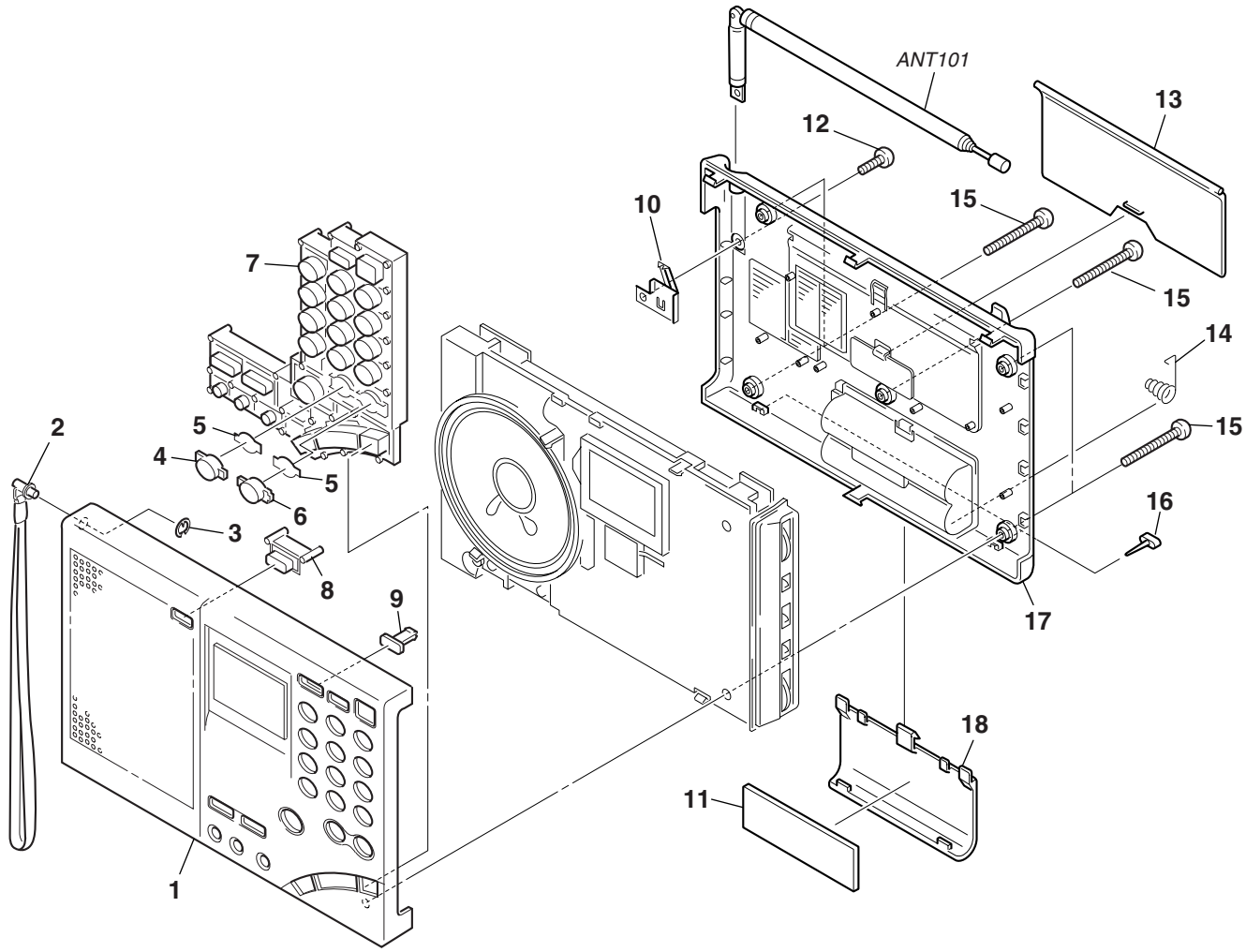
• IC302 μPD17073GB-564-1A7 (DIGITAL TUNING SYSTEM CONTROL)

Pin No.	Pin Name	I/O	Description
1	LIGHT	O	Light control signal output
2	$\overline{\text{MUTING}}$	O	Muting signal output
3	KS6	O	Key source signal output
4	KS5	O	Key source signal output
5	KS4	O	Key source signal output
6	KS3	O	Key source signal output
7	KS2	O	Key source signal output
8	KS1	O	Key source signal output
9	KS0	O	Key source signal output
10	KR3	I	Key return signal input
11	KR2	I	Key return signal input
12	KR1	I	Key return signal input
13	KR0	I	Key return signal input
14	HOLD	I	Key input protect switch signal input
15	POWER	O	Radio power control signal output
16	AM/$\overline{\text{FM}}$	O	AM/FM select signal output
17	BAR/$\overline{\text{ROD}}$	O	Bar/Rod antenna select signal output
18	GND	–	Ground
19	EO	O	Error signal output
20	VCOL	I	AM VCO (local oscillation) frequency input
21	VCOH	I	FM VCO (local oscillation) frequency input
22	REG PLL	O	Output of PLL voltage regulator
23	VDD	–	Power supply (+3V)
24	XOUT	O	Pin for connecting crystal resonator for system clock
25	XIN	I	Pin for connecting crystal resonator for system clock
26	REG OSC	O	Output of voltage regulator for oscillation circuit
27	REG LCD0	O	LCD drive voltage output
28	CAP LCD0	–	Pin for capacitor connection for LCD drive voltage
29	CAP LCD1	–	Pin for capacitor connection for LCD drive voltage
30	REG LCD1	O	LCD drive voltage output
31 - 34	COM0 - 3	O	LCD common signal output
35 - 49	LCD0 - 14	O	LCD segment signal output
50	CE	I	Chip select enable input
51	VDET	I	Low voltage detect signal input
52	BEEP	O	BEEP signal output
53	SD	I	Signal detector signal input
54	METER	I	Reception level signal input
55	SCK	O	Serial clock output for EEPROM
56	SI/SO	I/O	Serial data input or output for EEPROM

SECTION 5
EXPLODED VIEWS

NOTE:
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
  CH : Chinese model
  CND : Canadian model
  EA : Saudi Arabia model

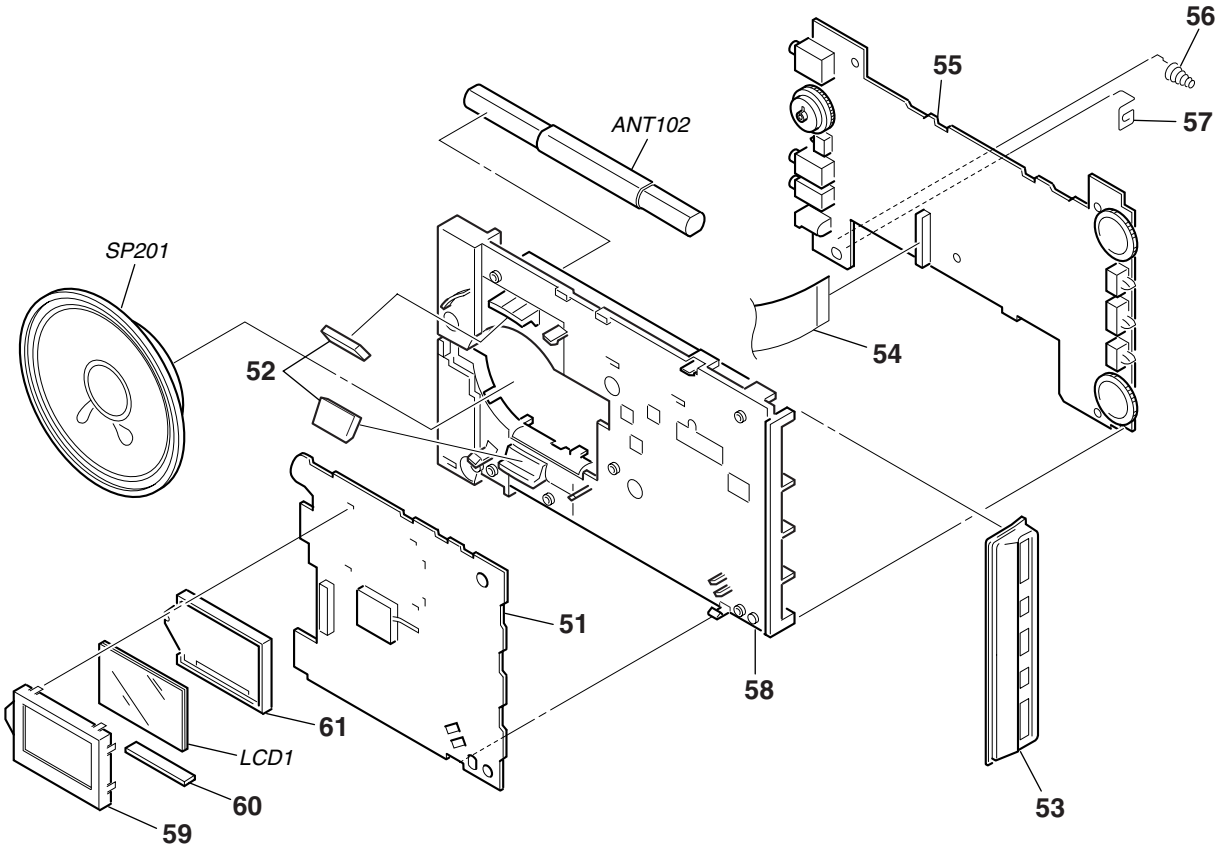
5-1. CABINET SECTION



Ref. No.	Part No.	Description	Remarks
1	X-3380-592-1	CABINET (FRONT) ASSY (EXCEPT CND)	
1	X-3380-593-1	CABINET (FRONT) ASSY (CND)	
2	3-881-938-00	STRAP, HAND	
3	7-624-104-04	STOP RING 2.0, TYPE -E	
4	3-227-386-01	BUTTON (PAGE)	
5	3-227-387-01	SHEET (BUTTON), ADHESIVE	
6	3-227-385-01	BUTTON (SCAN)	
7	3-227-384-01	BUTTON (10 KEY)	
8	3-227-388-01	BUTTON (LIGHT)	
9	3-227-405-01	KNOB (HOLD)	
10	3-227-401-01	PLATE (ANT), CONTACT	

Ref. No.	Part No.	Description	Remarks
11	3-893-852-01	CUSHION (BATTERY CASE LID)	
12	3-918-696-01	SCREW (M3X6 LOCK ACE)	
13	3-227-402-01	STAND	
14	3-227-403-01	TERMINAL (+/-), BATTERY	
15	7-685-152-19	SCREW +BTP 3X25 TYPE2 N-S	
16	3-893-846-01	FOOT, RUBBER	
17	3-227-400-01	CABINET (REAR) (EXCEPT CH)	
17	3-227-400-11	CABINET (REAR) (CH)	
18	3-227-404-01	LID, BATTERY CASE	
ANT101	1-501-712-11	ANTENNA, TELESCOPIC	

5-2. CHASSIS SECTION



Ref. No.	Part No.	Description	Remarks
* 51	A-4440-289-A	KEY BOARD, COMPLETE	
52	4-910-502-01	CUSHION, ANTENNA	
53	3-227-395-01	PANEL (SIDE) (EXCEPT EA)	
53	3-227-395-11	PANEL (SIDE) (EA)	
54	1-757-510-11	WIRE (FLAT TYPE) (18 CORE)	
* 55	A-4440-288-A	MAIN BOARD, COMPLETE (EXCEPT CH,EA)	
* 55	A-4440-290-A	MAIN BOARD, COMPLETE (EA)	
* 55	A-4440-291-A	MAIN BOARD, COMPLETE (CH)	
56	3-227-397-01	TERMINAL (-), BATTERY	

Ref. No.	Part No.	Description	Remarks
57	3-227-396-01	TERMINAL (+), BATTERY	
58	3-227-392-01	CHASSIS	
* 59	3-227-389-01	HOLDER (LCD)	
* 60	1-694-751-11	CONDUCTIVE BOARD, CONNECTION	
* 61	3-227-390-01	CASE (LCD)	
ANT102	1-402-479-21	ANTENNA, FERRITE-ROD (LW/MW)	
LCD1	1-804-194-11	DISPLAY PANEL, LIQUID CRYSTAL	
SP201	1-529-942-11	SPEAKER (7.7cm)	

SECTION 6
ELECTRICAL PARTS LIST

KEY

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS:
  uF: µF
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- COILS
  uH: µH
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA...: µA... , uPA... , µPA... , uPB... , µPB... , uPC... , µPC... , uPD..., µPD...
- Abbreviation
  CH : Chinese model
  CND : Canadian model
  EA : Saudi Arabia model
  JE : Tourist model
  SP : Singapore model

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remarks
*	A-4440-289-A	KEY BOARD, COMPLETE			
		**********			
*	1-694-751-11	CONDUCTIVE BOARD, CONNECTION			
*	3-227-389-01	HOLDER (LCD)			
*	3-227-390-01	CASE (LCD)			
		< CAPACITOR >			
C301	1-164-315-11	CERAMIC CHIP	470PF	5.00%	50V
C302	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C303	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C304	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C305	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C306	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C307	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C308	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C309	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C310	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C311	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C312	1-115-156-11	CERAMIC CHIP	1uF		10V
C313	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C314	1-115-156-11	CERAMIC CHIP	1uF		10V
C315	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C316	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C317	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C318	1-162-925-11	CERAMIC CHIP	68PF	5.00%	50V
C319	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C320	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C321	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C322	1-115-156-11	CERAMIC CHIP	1uF		10V
C323	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C324	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C325	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C326	1-115-416-11	CERAMIC CHIP	0.001uF	5.00%	25V
C327	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C328	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C329	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C330	1-164-315-11	CERAMIC CHIP	470PF	5.00%	50V
C331	1-136-177-00	FILM	1uF	5.00%	50V
C332	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C333	1-126-166-11	ELECT	2200uF		5.5V
C334	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C335	1-115-156-11	CERAMIC CHIP	1uF		10V
C336	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C338	1-115-156-11	CERAMIC CHIP	1uF		10V
C339	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C341	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C342	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C343	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
		< CONNECTOR >			
* CN301	1-691-077-21	HOUSING, CONNECTOR 18P			
		< DIODE >			
D301	8-719-980-90	DIODE SLP-381F-51-AB			
D302	8-719-988-61	DIODE 1SS355TE-17			
D303	8-719-988-61	DIODE 1SS355TE-17			
D304	8-719-988-61	DIODE 1SS355TE-17			
D305	8-719-988-61	DIODE 1SS355TE-17			
D306	8-719-941-04	DIODE SB007-03CP			
D308	8-719-977-40	DIODE DTZ13B			
		< IC >			
IC301	8-759-679-18	IC S-24C02BFJ-TB			
IC302	6-800-111-01	IC uPD17073GB-564-1A7			
IC303	8-759-549-49	IC S-80835ANNP-EDZ-T2			
IC304	8-759-676-76	IC R3111Q311A-TR			
IC305	8-759-492-58	IC RN5RL30AA-TL			
		< LIQUID CRYSTAL DISPLAY >			
LCD1	1-804-194-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< TRANSISTOR >			
Q301	8-729-028-97	TRANSISTOR DTC114TUA-T106			
Q302	8-729-220-93	TRANSISTOR 2SK209-G			
Q303	8-729-220-93	TRANSISTOR 2SK209-G			
Q304	8-729-423-52	TRANSISTOR 2SC3931-C			
Q305	8-729-028-92	TRANSISTOR DTA144TUA-T106			
Q306	8-729-402-32	TRANSISTOR 2SD1819A-R			
		< RESISTOR >			
R301	1-216-797-11	METAL CHIP	10	5%	1/16W
R302	1-216-845-11	METAL CHIP	100K	5%	1/16W
R303	1-216-845-11	METAL CHIP	100K	5%	1/16W
R304	1-216-845-11	METAL CHIP	100K	5%	1/16W

KEY

Ref. No.	Part No.	Description			Remarks
R305	1-216-813-11	METAL CHIP	220	5%	1/16W
R306	1-216-821-11	METAL CHIP	1K	5%	1/16W
R307	1-216-821-11	METAL CHIP	1K	5%	1/16W
R308	1-216-821-11	METAL CHIP	1K	5%	1/16W
R309	1-216-821-11	METAL CHIP	1K	5%	1/16W
R310	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R311	1-216-845-11	METAL CHIP	100K	5%	1/16W
R312	1-216-845-11	METAL CHIP	100K	5%	1/16W
R313	1-216-845-11	METAL CHIP	100K	5%	1/16W
R314	1-216-845-11	METAL CHIP	100K	5%	1/16W
R315	1-216-845-11	METAL CHIP	100K	5%	1/16W
R316	1-216-845-11	METAL CHIP	100K	5%	1/16W
R317	1-216-845-11	METAL CHIP	100K	5%	1/16W
R318	1-216-845-11	METAL CHIP	100K	5%	1/16W
R319	1-216-845-11	METAL CHIP	100K	5%	1/16W
R320	1-216-845-11	METAL CHIP	100K	5%	1/16W
R321	1-216-845-11	METAL CHIP	100K	5%	1/16W
R322	1-216-845-11	METAL CHIP	100K	5%	1/16W
R323	1-216-845-11	METAL CHIP	100K	5%	1/16W
R324	1-216-845-11	METAL CHIP	100K	5%	1/16W
R325	1-216-845-11	METAL CHIP	100K	5%	1/16W
R326	1-216-845-11	METAL CHIP	100K	5%	1/16W
R327	1-216-845-11	METAL CHIP	100K	5%	1/16W
R328	1-216-845-11	METAL CHIP	100K	5%	1/16W
R329	1-216-845-11	METAL CHIP	100K	5%	1/16W
R330	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R331	1-216-805-11	METAL CHIP	47	5%	1/16W
R332	1-216-833-11	METAL CHIP	10K	5%	1/16W
R333	1-216-821-11	METAL CHIP	1K	5%	1/16W
R334	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R335	1-216-833-11	METAL CHIP	10K	5%	1/16W
R336	1-216-797-11	METAL CHIP	10	5%	1/16W
R337	1-216-813-11	METAL CHIP	220	5%	1/16W
R338	1-216-843-11	METAL CHIP	68K	5%	1/16W
R339	1-216-845-11	METAL CHIP	100K	5%	1/16W
R340	1-216-857-11	METAL CHIP	1M	5%	1/16W
R341	1-216-857-11	METAL CHIP	1M	5%	1/16W
R342	1-216-821-11	METAL CHIP	1K	5%	1/16W
R343	1-216-821-11	METAL CHIP	1K	5%	1/16W
R344	1-216-821-11	METAL CHIP	1K	5%	1/16W
R345	1-216-833-11	METAL CHIP	10K	5%	1/16W
R346	1-216-797-11	METAL CHIP	10	5%	1/16W
R347	1-216-833-11	METAL CHIP	10K	5%	1/16W
R348	1-216-847-11	METAL CHIP	150K	5%	1/16W
R349	1-216-847-11	METAL CHIP	150K	5%	1/16W
R350	1-216-821-11	METAL CHIP	1K	5%	1/16W
R351	1-216-821-11	METAL CHIP	1K	5%	1/16W
R352	1-216-821-11	METAL CHIP	1K	5%	1/16W
R353	1-216-821-11	METAL CHIP	1K	5%	1/16W
R354	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R355	1-216-821-11	METAL CHIP	1K	5%	1/16W
R356	1-216-821-11	METAL CHIP	1K	5%	1/16W
R357	1-216-821-11	METAL CHIP	1K	5%	1/16W
R358	1-216-821-11	METAL CHIP	1K	5%	1/16W
R359	1-216-821-11	METAL CHIP	1K	5%	1/16W
R360	1-216-821-11	METAL CHIP	1K	5%	1/16W
R361	1-216-821-11	METAL CHIP	1K	5%	1/16W
R362	1-216-821-11	METAL CHIP	1K	5%	1/16W
R363	1-216-821-11	METAL CHIP	1K	5%	1/16W
R364	1-216-857-11	METAL CHIP	1M	5%	1/16W
R365	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R366	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R367	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R368	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R369	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R370	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R371	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R372	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R373	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R374	1-216-809-11	METAL CHIP	100	5%	1/16W
R375	1-216-864-11	SHORT	0		
R376	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R377	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R378	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R379	1-216-821-11	METAL CHIP	1K	5%	1/16W
R380	1-216-821-11	METAL CHIP	1K	5%	1/16W

< SWITCH >

S301	1-762-196-21	SWITCH, TACT (1)
S302	1-762-196-21	SWITCH, TACT (2)
S303	1-762-196-21	SWITCH, TACT (3)
S304	1-762-196-21	SWITCH, TACT (POWER)
S305	1-762-196-21	SWITCH, TACT (4)
S306	1-762-196-21	SWITCH, TACT (5)
S307	1-762-196-21	SWITCH, TACT (6)
S308	1-762-196-21	SWITCH, TACT (SLEEP)
S309	1-762-196-21	SWITCH, TACT (7)
S310	1-762-196-21	SWITCH, TACT (8)
S311	1-762-196-21	SWITCH, TACT (9)
S312	1-762-196-21	SWITCH, TACT (LIGHT)
S313	1-762-196-21	SWITCH, TACT (DIRECT)
S314	1-762-196-21	SWITCH, TACT (0)
S315	1-762-196-21	SWITCH, TACT (EXE)
S316	1-762-196-21	SWITCH, TACT (FM/AM)
S317	1-762-196-21	SWITCH, TACT (⏮)
S318	1-762-196-21	SWITCH, TACT (⏭)
S319	1-762-196-21	SWITCH, TACT (a)
S320	1-762-196-21	SWITCH, TACT (PAGE)
S321	1-571-760-11	SWITCH, KEY BOARD (⇦)
S322	1-571-760-11	SWITCH, KEY BOARD (⇨)
S323	1-762-196-21	SWITCH, TACT (b)
S325	1-762-196-21	SWITCH, TACT (ERASE)
S326	1-762-196-21	SWITCH, TACT (SCAN)
S327	1-762-196-21	SWITCH, TACT (AM BAND)
S328	1-762-196-21	SWITCH, TACT (ENTER)
S329	1-553-977-00	SWITCH, SLIDE (HOLD ➞)

< VIBRATOR >

X301	1-767-517-11	VIBRATOR, CRYSTAL (75kHz)

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Ref. No.	Part No.	Description			Remarks
*	A-4440-288-A	MAIN BOARD, COMPLETE (EXCEPT CH, EA)			
*	A-4440-290-A	MAIN BOARD, COMPLETE (EA)			
*	A-4440-291-A	MAIN BOARD, COMPLETE (CH)			
		**********			
		< CAPACITOR >			
C101	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C102	1-162-908-11	CERAMIC CHIP	3PF	0.25PF	50V
C103	1-115-416-11	CERAMIC CHIP	0.001uF	5.00%	25V
C107	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C108	1-115-416-11	CERAMIC CHIP	0.001uF	5.00%	25V
C109	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C110	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C111	1-164-230-11	CERAMIC CHIP	220PF	5.00%	50V
C112	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C113	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C114	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C115	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C116	1-162-907-11	CERAMIC CHIP	2PF	0.25PF	50V
C117	1-162-908-11	CERAMIC CHIP	3PF	0.25PF	50V
C118	1-164-739-11	CERAMIC CHIP	560PF	5.00%	50V
C119	1-162-926-11	CERAMIC CHIP	82PF	5%	50V
C120	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C121	1-124-589-11	ELECT	47uF	20%	16V
C122	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C123	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C124	1-162-905-11	CERAMIC CHIP	1PF	0.25PF	50V
C125	1-162-926-11	CERAMIC CHIP	82PF	5%	50V
C126	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C127	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C128	1-124-589-11	ELECT	47uF	20%	16V
C129	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C130	1-162-914-11	CERAMIC CHIP	9PF	0.50PF	50V
C131	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C132	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C133	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C134	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C135	1-124-589-11	ELECT	47uF	20%	16V
C136	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C137	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C138	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C139	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C140	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C141	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C142	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C143	1-165-176-11	CERAMIC CHIP	0.047uF	10.00%	16V
C144	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C145	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C146	1-124-589-11	ELECT	47uF	20%	16V
C147	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C148	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C149	1-162-905-11	CERAMIC CHIP	1PF	0.25PF	50V
C150	1-124-589-11	ELECT	47uF	20%	16V
C151	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C152	1-161-021-11	CERAMIC	0.047uF	10%	25V
C153	1-162-905-11	CERAMIC CHIP	1PF	0.25PF	50V
C154	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C155	1-162-913-11	CERAMIC CHIP	8PF	0.50PF	50V
C156	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C157	1-124-589-11	ELECT	47uF	20%	16V
C159	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C160	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C200	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C201	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C202	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C203	1-115-156-11	CERAMIC CHIP	1uF		10V
C204	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C205	1-104-915-11	TANTALUM CHIP	2.2uF	20%	10V
C206	1-115-156-11	CERAMIC CHIP	1uF		10V
C207	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C208	1-115-156-11	CERAMIC CHIP	1uF		10V
C209	1-124-261-00	ELECT	10uF	20%	50V
C210	1-115-156-11	CERAMIC CHIP	1uF		10V
C211	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C212	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C213	1-115-156-11	CERAMIC CHIP	1uF		10V
C214	1-104-752-11	TANTAL. CHIP	33uF	20.00%	4V
C215	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C216	1-162-907-11	CERAMIC CHIP	2PF	0.25PF	50V
C217	1-115-416-11	CERAMIC CHIP	0.001uF	5.00%	25V
C218	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C219	1-115-416-11	CERAMIC CHIP	0.001uF	5.00%	25V
C220	1-115-156-11	CERAMIC CHIP	1uF		10V
C221	1-124-584-00	ELECT	100uF	20%	10V
C222	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C223	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C224	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C225	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C226	1-164-739-11	CERAMIC CHIP	560PF	5.00%	50V
C227	1-115-156-11	CERAMIC CHIP	1uF		10V
C228	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C229	1-164-245-11	CERAMIC CHIP	0.015uF	10.00%	25V
C230	1-115-156-11	CERAMIC CHIP	1uF		10V
C231	1-124-261-00	ELECT	10uF	20%	50V
C232	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C233	1-115-156-11	CERAMIC CHIP	1uF		10V
C234	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C235	1-115-412-11	CERAMIC CHIP	680PF	5.00%	25V
C236	1-115-156-11	CERAMIC CHIP	1uF		10V
C237	1-164-245-11	CERAMIC CHIP	0.015uF	10.00%	25V
C238	1-164-245-11	CERAMIC CHIP	0.015uF	10.00%	25V
C239	1-115-156-11	CERAMIC CHIP	1uF		10V
C240	1-115-156-11	CERAMIC CHIP	1uF		10V
C241	1-164-677-11	CERAMIC CHIP	0.033uF	10.00%	16V
C242	1-164-677-11	CERAMIC CHIP	0.033uF	10.00%	16V
C245	1-124-261-00	ELECT	10uF	20%	50V
C246	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C247	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C248	1-115-156-11	CERAMIC CHIP	1uF		10V
C249	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C250	1-115-156-11	CERAMIC CHIP	1uF		10V
C251	1-115-156-11	CERAMIC CHIP	1uF		10V
C252	1-115-156-11	CERAMIC CHIP	1uF		10V
C253	1-124-261-00	ELECT	10uF	20%	50V
C254	1-135-210-11	TANTALUM CHIP	4.7uF	20%	10V
C255	1-135-210-11	TANTALUM CHIP	4.7uF	20%	10V

MAIN

Ref. No.	Part No.	Description			Remarks
C256	1-115-156-11	CERAMIC CHIP	1uF		10V
C257	1-115-156-11	CERAMIC CHIP	1uF		10V
C258	1-115-156-11	CERAMIC CHIP	1uF		10V
C259	1-126-935-11	ELECT	470uF	20.00%	10V
C260	1-124-261-00	ELECT	10uF	20%	50V
C261	1-124-635-00	ELECT	220uF	20.00%	6.3V
C262	1-124-589-11	ELECT	47uF	20%	16V
C263	1-165-112-11	CERAMIC CHIP	0.33uF		16V
C264	1-165-112-11	CERAMIC CHIP	0.33uF		16V
C265	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V
C266	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C267	1-124-261-00	ELECT	10uF	20%	50V
C268	1-115-156-11	CERAMIC CHIP	1uF		10V
C269	1-126-935-11	ELECT	470uF	20.00%	10V
C270	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C271	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C272	1-124-589-11	ELECT	47uF	20%	16V
C273	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C274	1-124-261-00	ELECT	10uF	20%	50V
C277	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C279	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C280	1-115-156-11	CERAMIC CHIP	1uF		10V
C281	1-115-156-11	CERAMIC CHIP	1uF		10V
C282	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C283	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C284	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C285	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C286	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C287	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C289	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C290	1-162-904-11	CERAMIC CHIP	0.5PF	0.25PF	50V
C291	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C292	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C293	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
		< FILTER >			
CF201	1-577-030-11	FILTER, CERAMIC (455kHz)			
CF202	1-577-574-11	FILTER, CERAMIC (10.7MHz)			
CF203	1-577-574-11	FILTER, CERAMIC (10.7MHz)			
CF204	1-760-478-11	VIBRATOR, CERAMIC (3.64MHz)			
CF205	1-567-163-11	FILTER, CERAMIC (10.7MHz)			
		< CONNECTOR >			
CN201	1-691-050-21	HOUSING, CONNECTOR 18P			
		< TRIMMER >			
CT101	1-141-304-21	CAP, TRIMMER	10PF		
CT102	1-141-304-21	CAP, TRIMMER	10PF		
CT201	1-141-442-91	CAP, CERAMIC TRIMMER	20PF		
CT202	1-141-304-21	CAP, TRIMMER	10PF		
		< DIODE >			
D101	8-719-002-81	DIODE	1T363		
D102	8-719-002-81	DIODE	1T363		
D103	8-719-421-40	DIODE	MA77		
D104	8-719-800-76	DIODE	1SS226		
D105	8-719-421-40	DIODE	MA77		
D106	8-719-421-40	DIODE	MA77		

Ref. No.	Part No.	Description	Remarks
D107	8-719-421-40	DIODE MA77	
D108	8-719-421-40	DIODE MA77	
D109	8-719-002-81	DIODE 1T363	
D110	8-719-988-61	DIODE 1SS355TE-17	
D111	8-719-988-61	DIODE 1SS355TE-17	
D201	8-719-002-81	DIODE 1T363	
D202	8-719-988-61	DIODE 1SS355TE-17	
D203	8-719-977-40	DIODE DTZ13B	
D204	8-719-988-61	DIODE 1SS355TE-17	
D205	8-719-975-40	DIODE RB411D	
D206	8-719-941-04	DIODE SB007-03CP	
D207	8-719-977-40	DIODE DTZ13B	
		< IC >	
IC201	8-752-064-31	IC CXA1376AS	
IC202	6-700-363-01	IC LA3335M-TE-L	
IC203	8-752-059-51	IC CXA1522P	
IC204	6-700-364-01	IC LA5003M-TE-L	
		< JACK >	
J101	1-569-187-11	JACK (AM EXT ANT) (EXCEPT CH)	
J201	1-573-670-11	JACK 1P (LINE OUT)	
J202	1-566-891-11	JACK (HEADPHONE)	
J203	1-580-681-21	JACK,DC(POLARITY UNIFIED TYPE) (DC IN 6V)	(EXCEPT CH)
		< COIL >	
L101	1-412-963-11	INDUCTOR 100uH	
L102	1-412-939-11	INDUCTOR 1uH	
L103	1-412-938-11	INDUCTOR 0.82uH	
L104	1-412-938-11	INDUCTOR 0.82uH	
L105	1-412-945-11	INDUCTOR 3.3uH	
L106	1-412-953-11	INDUCTOR 15uH	
L107	1-410-658-31	INDUCTOR CHIP 220uH	
L108	1-412-950-11	INDUCTOR 8.2uH	
L109	1-412-938-11	INDUCTOR 0.82uH	
L110	1-412-939-11	INDUCTOR 1uH	
L111	1-412-938-11	INDUCTOR 0.82uH	
L112	1-412-933-11	INDUCTOR 0.33uH	
L113	1-412-935-11	INDUCTOR 0.47uH	
L114	1-412-947-11	INDUCTOR 4.7uH	
L115	1-412-939-11	INDUCTOR 1uH	
L200	1-412-963-11	INDUCTOR 100uH	
L201	1-412-949-21	INDUCTOR 6.8uH	
L202	1-412-951-11	INDUCTOR 10uH	
L203	1-412-935-11	INDUCTOR 0.47uH	
L204	1-412-935-11	INDUCTOR 0.47uH	
L205	1-412-963-11	INDUCTOR 100uH	
L206	1-412-961-11	INDUCTOR 68uH	
		< TRANSISTOR >	
Q101	8-729-402-32	TRANSISTOR 2SD1819A-R	
Q104	8-729-123-86	TRANSISTOR 2SK238-K16	
Q105	8-729-423-52	TRANSISTOR 2SC3931-C	
Q106	8-729-402-32	TRANSISTOR 2SD1819A-R	
Q107	8-729-116-64	TRANSISTOR 2SK508-K51	
Q108	8-729-402-32	TRANSISTOR 2SD1819A-R	
Q109	8-729-116-64	TRANSISTOR 2SK508-K51	

Ref. No.	Part No.	Description			Remarks
Q110	8-729-116-64	TRANSISTOR	2SK508-K51		
Q111	8-729-208-47	TRANSISTOR	2SK210-GR		
Q112	8-729-423-52	TRANSISTOR	2SC3931-C		
Q113	8-729-402-32	TRANSISTOR	2SD1819A-R		
Q114	8-729-423-52	TRANSISTOR	2SC3931-C		
Q115	8-729-402-32	TRANSISTOR	2SD1819A-R		
Q116	8-729-123-86	TRANSISTOR	2SK238-K16		
Q117	8-729-423-52	TRANSISTOR	2SC3931-C		
Q118	8-729-208-47	TRANSISTOR	2SK210-GR		
Q119	8-729-423-52	TRANSISTOR	2SC3931-C		
Q120	8-729-423-52	TRANSISTOR	2SC3931-C		
Q121	8-729-402-32	TRANSISTOR	2SD1819A-R		
Q201	8-729-403-24	TRANSISTOR	XN4210		
Q202	8-729-403-24	TRANSISTOR	XN4210		
Q203	8-729-028-92	TRANSISTOR	DTA144TUA-T106		
Q204	8-729-029-15	TRANSISTOR	DTC144TUA-T106		
Q205	8-729-029-15	TRANSISTOR	DTC144TUA-T106		
Q206	8-729-423-52	TRANSISTOR	2SC3931-C		
Q207	8-729-028-74	TRANSISTOR	DTA114TUA-T106		
Q208	8-729-029-15	TRANSISTOR	DTC144TUA-T106		
Q209	8-729-402-32	TRANSISTOR	2SD1819A-R		
Q210	8-729-403-24	TRANSISTOR	XN4210		
Q211	8-729-402-13	TRANSISTOR	XN1501		
Q212	8-729-028-92	TRANSISTOR	DTA144TUA-T106		
Q213	8-729-402-32	TRANSISTOR	2SD1819A-R		
Q214	8-729-402-32	TRANSISTOR	2SD1819A-R		
Q215	8-729-028-74	TRANSISTOR	DTA114TUA-T106		
Q216	8-729-402-13	TRANSISTOR	XN1501		
Q217	8-729-028-74	TRANSISTOR	DTA114TUA-T106		
Q218	8-729-402-16	TRANSISTOR	XN4608		
Q219	8-729-402-16	TRANSISTOR	XN4608		
Q220	8-729-028-74	TRANSISTOR	DTA114TUA-T106		
Q221	8-729-402-16	TRANSISTOR	XN4608		
Q222	8-729-402-13	TRANSISTOR	XN1501		
Q223	8-729-029-15	TRANSISTOR	DTC144TUA-T106		
Q224	8-729-800-71	TRANSISTOR	2SB815B7-TB		
Q225	8-729-800-71	TRANSISTOR	2SB815B7-TB		
		< RESISTOR >			
R101	1-216-821-11	METAL CHIP	1K	5%	1/16W
R103	1-216-845-11	METAL CHIP	100K	5%	1/16W
R108	1-216-805-11	METAL CHIP	47	5%	1/16W
R109	1-216-845-11	METAL CHIP	100K	5%	1/16W
R110	1-216-817-11	METAL CHIP	470	5%	1/16W
R111	1-216-837-11	METAL CHIP	22K	5%	1/16W
R112	1-216-857-11	METAL CHIP	1M	5%	1/16W
R113	1-216-845-11	METAL CHIP	100K	5%	1/16W
R114	1-216-811-11	METAL CHIP	150	5%	1/16W
R115	1-216-833-11	METAL CHIP	10K	5%	1/16W
R116	1-216-821-11	METAL CHIP	1K	5%	1/16W
R117	1-216-853-11	METAL CHIP	470K	5%	1/16W
R118	1-216-809-11	METAL CHIP	100	5%	1/16W
R119	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R120	1-216-805-11	METAL CHIP	47	5%	1/16W
R121	1-216-821-11	METAL CHIP	1K	5%	1/16W
R122	1-216-847-11	METAL CHIP	150K	5%	1/16W
R123	1-216-841-11	METAL CHIP	47K	5%	1/16W
R124	1-216-832-11	METAL CHIP	8.2K	5%	1/16W
R125	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R126	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R127	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R128	1-216-809-11	METAL CHIP	100	5%	1/16W
R129	1-216-809-11	METAL CHIP	100	5%	1/16W
R130	1-216-805-11	METAL CHIP	47	5%	1/16W
R133	1-216-809-11	METAL CHIP	100	5%	1/16W
R134	1-216-815-11	METAL CHIP	330	5%	1/16W
R135	1-216-805-11	METAL CHIP	47	5%	1/16W
R137	1-216-832-11	METAL CHIP	8.2K	5%	1/16W
R139	1-216-857-11	METAL CHIP	1M	5%	1/16W
R140	1-216-845-11	METAL CHIP	100K	5%	1/16W
R141	1-216-841-11	METAL CHIP	47K	5%	1/16W
R142	1-216-847-11	METAL CHIP	150K	5%	1/16W
R143	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R144	1-216-805-11	METAL CHIP	47	5%	1/16W
R145	1-216-797-11	METAL CHIP	10	5%	1/16W
R146	1-216-817-11	METAL CHIP	470	5%	1/16W
R147	1-216-841-11	METAL CHIP	47K	5%	1/16W
R148	1-216-797-11	METAL CHIP	10	5%	1/16W
R149	1-216-803-11	METAL CHIP	33	5%	1/16W
R150	1-216-797-11	METAL CHIP	10	5%	1/16W
R151	1-216-803-11	METAL CHIP	33	5%	1/16W
R152	1-216-839-11	METAL CHIP	33K	5%	1/16W
R153	1-216-841-11	METAL CHIP	47K	5%	1/16W
R155	1-216-797-11	METAL CHIP	10	5%	1/16W
R156	1-216-853-11	METAL CHIP	470K	5%	1/16W
R157	1-216-845-11	METAL CHIP	100K	5%	1/16W
R159	1-216-821-11	METAL CHIP	1K	5%	1/16W
R160	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R161	1-216-809-11	METAL CHIP	100	5%	1/16W
R162	1-216-864-11	SHORT	0		
R201	1-216-851-11	METAL CHIP	330K	5%	1/16W
R202	1-216-837-11	METAL CHIP	22K	5%	1/16W
R203	1-216-836-11	METAL CHIP	18K	5%	1/16W
R204	1-216-839-11	METAL CHIP	33K	5%	1/16W
R205	1-216-809-11	METAL CHIP	100	5%	1/16W
R206	1-216-817-11	METAL CHIP	470	5%	1/16W
R207	1-216-845-11	METAL CHIP	100K	5%	1/16W
R208	1-216-845-11	METAL CHIP	100K	5%	1/16W
R209	1-216-841-11	METAL CHIP	47K	5%	1/16W
R210	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R211	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R212	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R213	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R214	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R215	1-216-833-11	METAL CHIP	10K	5%	1/16W
R217	1-216-809-11	METAL CHIP	100	5%	1/16W
R218	1-216-837-11	METAL CHIP	22K	5%	1/16W
R219	1-216-845-11	METAL CHIP	100K	5%	1/16W
R220	1-216-845-11	METAL CHIP	100K	5%	1/16W
R221	1-216-797-11	METAL CHIP	10	5%	1/16W
R222	1-216-839-11	METAL CHIP	33K	5%	1/16W
R223	1-216-809-11	METAL CHIP	100	5%	1/16W
R224	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R225	1-216-833-11	METAL CHIP	10K	5%	1/16W
R226	1-216-840-11	METAL CHIP	39K	5%	1/16W

MAIN

Ref. No.	Part No.	Description			Remarks
R227	1-216-841-11	METAL CHIP	47K	5%	1/16W
R228	1-216-809-11	METAL CHIP	100	5%	1/16W
R229	1-216-855-11	METAL CHIP	680K	5%	1/16W
R230	1-216-841-11	METAL CHIP	47K	5%	1/16W
R231	1-216-833-11	METAL CHIP	10K	5%	1/16W
R232	1-216-805-11	METAL CHIP	47	5%	1/16W
R233	1-216-855-11	METAL CHIP	680K	5%	1/16W
R234	1-216-841-11	METAL CHIP	47K	5%	1/16W
R235	1-216-833-11	METAL CHIP	10K	5%	1/16W
R236	1-216-805-11	METAL CHIP	47	5%	1/16W
R237	1-216-837-11	METAL CHIP	22K	5%	1/16W
R238	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R239	1-216-821-11	METAL CHIP	1K	5%	1/16W
R240	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R241	1-216-833-11	METAL CHIP	10K	5%	1/16W
R242	1-216-833-11	METAL CHIP	10K	5%	1/16W
R243	1-216-805-11	METAL CHIP	47	5%	1/16W
R244	1-216-805-11	METAL CHIP	47	5%	1/16W
R245	1-216-809-11	METAL CHIP	100	5%	1/16W
R246	1-216-809-11	METAL CHIP	100	5%	1/16W
R248	1-216-821-11	METAL CHIP	1K	5%	1/16W
R249	1-216-845-11	METAL CHIP	100K	5%	1/16W
R250	1-216-845-11	METAL CHIP	100K	5%	1/16W
R251	1-216-845-11	METAL CHIP	100K	5%	1/16W
R252	1-216-805-11	METAL CHIP	47	5%	1/16W
R253	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R254	1-216-841-11	METAL CHIP	47K	5%	1/16W
R255	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R256	1-216-841-11	METAL CHIP	47K	5%	1/16W
R257	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R258	1-216-841-11	METAL CHIP	47K	5%	1/16W
R260	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R261	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R262	1-216-841-11	METAL CHIP	47K	5%	1/16W
R263	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R264	1-216-809-11	METAL CHIP	100	5%	1/16W
R265	1-216-809-11	METAL CHIP	100	5%	1/16W
R266	1-216-809-11	METAL CHIP	100	5%	1/16W
R267	1-216-845-11	METAL CHIP	100K	5%	1/16W
R268	1-216-845-11	METAL CHIP	100K	5%	1/16W
R269	1-216-845-11	METAL CHIP	100K	5%	1/16W
R273	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R275	1-216-833-11	METAL CHIP	10K	5%	1/16W
R276	1-216-841-11	METAL CHIP	47K	5%	1/16W
R277	1-216-836-11	METAL CHIP	18K	5%	1/16W
R278	1-216-864-11	SHORT	0		
R281	1-216-864-11	SHORT	0		
		< VARIABLE RESISTOR >			
RV101	1-227-317-11	RES, VAR, CARBON 20K (ATT)			
RV201	1-227-388-11	RES, VAR, CARBON 50K (SSB FINE TUNE) (EXCEPT CH, EA)			
RV202	1-241-767-21	RES, ADJ, CARBON 100K			
RV203	1-241-765-11	RES, ADJ, CARBON 22K			
RV204	1-227-174-11	RES, VAR CARBON 50K (VOLUME◢)			

Ref. No.	Part No.	Description	Remarks
		< SWITCH >	
S101	1-571-850-81	SWITCH, SLIDE (ATT)	
S201	1-786-100-11	SWITCH, SLIDE (AM MODE)	
S202	1-571-850-81	SWITCH, SLIDE (SYNC)	
S203	1-571-850-81	SWITCH, SLIDE (TONE)	
		< TRANSFORMER >	
T101	1-460-037-11	COIL (WITH CORE)	
T102	1-460-038-11	COIL (WITH CORE)	
T103	1-426-357-11	TRANSFORMER, RF	
T104	1-404-780-21	TRANSFORMER, IF	
T105	1-426-158-00	COIL (RF)	
T106	1-435-847-11	TRANSFORMER, HIGH-FREQUENCY	
T107	1-416-825-11	COIL (OSC)	
T202	1-460-039-11	COIL (WITH CORE)	
T203	1-435-410-11	TRANSFORMER, DC-DC CONVERTER	
		< VIBRATOR >	
X201	1-795-253-21	VIBRATOR, CRYSTAL (55.390MHz)	
XF101	1-795-254-11	FILTER, CRYSTAL (55.545MHz)	
**********			
		MISCELLANEOUS	
		**********	
54	1-757-510-11	WIRE (FLAT TYPE) (18 CORE)	
* 60	1-694-751-11	CONDUCTIVE BOARD, CONNECTION	
ANT101	1-501-712-11	ANTENNA, TELESCOPIC	
ANT102	1-402-479-21	ANTENNA, FERRITE-ROD (LW/MW)	
LCD1	1-804-194-11	DISPLAY PANEL, LIQUID CRYSTAL	
SP201	1-529-942-11	SPEAKER (7.7cm)	
		ACCESSORIES & PACKING MATERIALS	
		**********	
⚠	1-476-122-12	ADAPTOR, AC (AC-E601) (JE)	
⚠	1-476-127-11	ADAPTOR, AC (AC-114) (SP)	
⚠	1-506-443-00	ADAPTOR, PLUG (JE)	
⚠	1-569-007-11	ADAPTOR, CONVERSION 2P (JE)	
	3-227-586-01	MANUAL, INSTRUCTION (JAPANISE/ENGLISH/ARABIC/KOREAN/CHINESE)(CH,JE,EA)	
	3-227-586-11	MANUAL, INSTRUCTION (ENGLISH/FRENCH/GERMAN/SPANISH/ITALIAN/PORTUGUESE) (US,CND,AEP,E,SP)	
	3-227-586-21	MANUAL, INSTRUCTION (ENGLISH/DUTCH/SWEDISH/RUSSIAN/FINNISH)(AEP)	
	3-229-205-01	CASE, CARRYING	
	3-893-802-14	BOOK, GUIDE, WAVE (US,CND,AEP,CH,E,JE,SP)	
	3-912-863-05	GUIDE, SHORT WAVE (EA)	
	8-953-130-90	HEADPHONE MDR-E805LP (JE)	
*	A-3638-036-A	ANTENNA, WIRE (SW)	
	X-3329-657-1	ATTACHMENT(JE)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

MEMO

REVISION HISTORY

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Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2001.03	New